THE FEDERAL COAL MANAGEMENT PROGRAM AND THE DEPARTMENT'S COAL LEASING POLICY

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I. INTRODUCTION

Energy is the Achilles' heel for America, whether speaking of consumer interests, national defense interests, or international affairs. Coal development can assist in the strengthening of America through the creation of jobs and economic security; fuel for industry or for electricity to heat and cool our homes, hospitals, and schools; and coal can contribute, through exports, to our balance of trade. The Federal Government, through sound management of its coal resources, can make an enormous contribution towards meeting American energy needs.

In terms of resource ownership, the Federal Government is a significant market influence. In the West, over 80 percent of the coal is controlled by the Federal Government -- 60 percent through direct ownership and 20 percent because of interspersed land ownership patterns. Of the Federal lands which contain 165 billion tons of demonstrated coal reserves, 18 billion tons have been leased to supply the American consumer.

The Interior Department has responsibility for leasing Federal coal lands and has developed an environmentally sensitive and economically sound leasing program. The Federal Coal Management Program is designed to give the Nation a greater assurance of being able to meet its national energy objectives; provide a means to promote a more desirable pattern of coal development with environmental protection; assure that State and local governments participate in decisions regarding where and when Federal coal production will take place; and increase competition in the coal industry.

Through the Federal Coal Management Program, coal leasing and development are being done in an environmentally sensitive manner which minimizes the economic and administrative burden on both the public and the Government while assuring a fair return to the Treasury for use of the Nation's coal resources. Some history of the development of this program provides insight.

The Past Decade

The current structure of the Federal Coal Management Program is the result of a series of events that began in 1970. In 1970, a Bureau of Land Management (BLM) study revealed that Federal coal leases were being obtained for speculative purposes and that production from leased Federal lands was inconsistent with the number of acres under lease. To illustrate, in 1945, 80,000 acres were under lease providing 10 million tons of coal annually. By 1971, acreage under lease increased to 800,000, but production had decreased to 9.1 million tons annually. (On February 24, 1984, a total of 17.74 billion tons of coal reserves on 948,783 acres were under lease with production at 105 million tons in 1983.) (See Table 6a page 69.)

An informal moratorium was placed on new leasing in 1971 and, in 1973, a formal moratorium was instituted which allowed new leasing only to meet short-term needs.

In 1974, a draft environmental impact statement (EIS) describing the Energy Minerals Allocation Recommendation System (EMARS I) was published. The final EIS was released in 1975, but the preferred program was retitled the Energy Minerals Activity Recommendation System (EMARS II). The EMARS II program was adopted as policy in January 1976 and final regulations were published in January 1977. This policy was heavily dependent on industry and public nominations to identify the need for tracts for development.

Shortly after the adoption of EMARS II as Departmental policy, a lawsuit was filed alleging that, because of certain defects, the 1975 final coal programmatic EIS was legally inadequate (NRDC et al., vs Royston Hughes et al.). On September 27, 1977, the U.S. District Court for the District of Columbia ruled that the EIS was inadequate, and the Department was therefore in violation of the National Environmental Policy Act (NEPA). Accordingly, the Department was enjoined from implementing the EMARS leasing policy and was directed to prepare a supplement to the coal programmatic EIS to meet the NEPA requirements.

During 1976 and 1977, legislative action also occurred that impacted the design of the Federal Coal Management Program. In 1976, the Federal Coal Leasing Amendments Act, which established specific rules to guide the development of Federal coal (including competitive leasing), was passed. In that same year, Congress enacted the Federal Land Policy and Management Act requiring that the Bureau and the Department ensure that all resource development decisions related to the public lands, including coal leasing, are made in cooperation with State and local governments as part of a comprehensive planning process. In addition, the Surface Mining Control and Reclamation Act of 1977 requires the Secretary to review Federal lands to determine whether they contain areas which are unsuitable for all, or certain types of, surface coal mining operations.

In 1977, a coal policy review was conducted within the Department which concluded that a new programmatic EIS would be prepared to fully consider the new legal requirements and to respond to the court order. The Department filed an appeal to the NRDC vs. Hughes decision (NRDC vs. Hughes, 454 F. Supp. 148 (D.D.C. 1978)) but reached a negotiated settlement that was adopted as the June 1978 amended court order. The amended court order allowed more flexibility to issue coal leases to meet certain "short-term" needs until a new coal leasing policy could be established.

The result of the coal policy review was a new programmatic EIS published in April 1979, the adoption of a new comprehensive program in June 1979, and the issuance of final program regulations in July 1979. The program was further refined in July 1982 to strengthen the leasing methodology and again in January 1983 to add additional public participation through the coal State Governors and to enhance the role of the regional coal teams.

Program Goals

The Federal Coal Management Program is designed to:

A. Make ample supplies of coal available to the market in order to provide coal at competitive prices for the benefit of national energy consumers.

B. Provide a range of alternative mining sites in order to promote the most efficient patterns of coal development with environmental protection.

C. Assure that the State and local governments participate in decisions about where and when Federal leasing and production will take place.

D. Increase the range of mining opportunities in order to stimulate competition in the coal industry.

The United States must reduce its vulnerability to new oil supply disruptions and must minimize key uncertainties about the Nation's energy future. As part of its overall minerals policy, the Department is facilitating the identification, exploration, and development of Federal energy resources -- particularly coal -- as a means of curtailing the foreign oil drain on the Nation's economy and enhancing national security. Opportunities to expedite coal and energy development are considered in the context of multiple-use resource management and established standards for environmental protection. Through the Federal Coal Management Program, coal leasing and development are conducted in a manner that minimizes the economic and adminstrative burden on both the private sector and the government while assuring a fair return to the Treasury for use of the Nation's coal resource.

Additionally, as a means of stimulating the national economy, the United States must ensure that the domestic energy market is competitive. In this endeavor, coal plays an integral part. The Federal Government, as a major owner of U.S. coal reserves 1/, has to guard against creating any institutional barriers to a free coal market that would artificially raise energy costs to the public.

1/ The Department, through the Bureau of Land Management (BLM), administers federally owned coal that is concentrated in six Western States (Colorado, Montana, New Mexico, North Dakota, Utah and Wyoming) and in smaller amounts in other States (e.g., Oklahoma and Alabama).

Program Configuration and Recent Coal Production

In January 1981, the Secretary of the Interior initiated steps for the development and use of the many resources in the realm of responsibility of the Department. This administration felt that the country's economic and national security were in jeopardy because of past failures to properly develop America's abundant natural resources, among the most important of these being coal. In 1981, less than 1 percent of Federal coal lands were under lease, and new leasing had been at a virtual standstill since 1971. The Nation was dependent upon foreign sources for 40 percent of its crude oil supply. By aggressively leasing more coal, this Nation can reduce this dependence on foreign supplies of energy and provide the American consumer energy at lower costs.

In 1981, the Department issued 22 coal leases on 48,895 acres, compared to 27 leases on 19,938 acres during 1979 and 1980. The Department increased by 800 percent the tonnage of coal leased in 1981 and 1982 over 1979 and 1980. The Department leased 1.9 billion tons of coal in 1981 and 1982, and 815 million tons in 1983 compared to 227 million tons leased in 1979 and 1980. All of this was achieved with proper environmental safeguards, land-use planning, open public participation and close consultation with State Governors, other agencies and Indian Tribes.

The Interior Department held one regional coal lease sale in Fiscal Year 1983. Four coal lease sales had been tentatively scheduled for Fiscal Year 1984 -- in the San Juan River, Uinta-Southwestern Utah, Southern Appalachian, and Green River-Hams Fork coal regions. These lease sales were to involve total proposed leasing levels in the range of 4.01 billion to 8.59 billion tons of Federal coal. The lease sale for the San Juan River Region was to be the first regional lease sale in that region since the Federal Coal Management Program was introduced in 1979.

The Growth of Western and Federal Coal Production

Since the OPEC price shock of 1973-1974, the United States has sought to expand domestic energy production. The area in which the greatest success has been achieved has been coal. Since 1973, there has been a 40 percent increase in U.S. coal production from 24 to 105 million tons per year. Of this increase, 82 percent has come from the west; since 1973, western coal production has risen from 76 to 268 million tons per year, contributing 33 percent of the total U.S. coal production. Federal coal has supplied almost half of the new western coal output.

While the contribution of Federal coal to total U.S. production has rapidly increased, it has not yet reached its potential as a major energy source. Although Federal coal constitutes 60 percent of the western reserves and indirectly affects development of another 20 percent due to ownership patterns, Federal coal only supplied 39 percent of western production in 1981.

Interior's coal management program is primarily directed toward issuing new leases through a regional process and involves four major steps. The first step is land-use planning and public review, where lands acceptable for further consideration for coal leasing are identified in conjunction with other resource decisions. In the second step--activity planning--a schedule for coal lease sales in each region is selected and analyzed with full public participation in an EIS. A leasing level for each region is selected by the Assistant Secretary in the third step of the program. In the fourth step, the Secretary decides, based on available information including the recommendations of the RCT and Governor(s), how much coal to offer, which tracts to offer and when to hold the sale(s). From the time a tract is selected for sale until a lease is issued, several administrative and statutory requirements must be completed. They include: (1) obtaining written consent from qualified private surface owners over federally owned coal; (2) public participation and consultation with State Governors, the Attorney General, affected Indian Tribes, and surface management agencies; and (3) evaluating the results of the competitive lease sale to determine if fair market value is achieved and to select the successful bidders.

The fundamental changes reflected in the coal leasing program include:

- Formal land-use planning with public involvement and Governor consultation;

- Full examination of alternative leasing strategies and full disclosure of environmental effects and mitigation measures;

- Leases offered competitively with assurances for receipt of fair market value; and

- Stringent diligent development requirements. (If a new lease is not developed and producing in commercial quantities within 10 years of lease issuance, the lease is forfeited and returned to the Federal Government.)

In addition, emergency lease applications for areas within coal regions are considered in the interest of resource conservation for cases where Federal coal may be bypassed or where coal is needed to continue existing production or meet existing contracts. The program also contains provisions for the processing of pending preference right lease applications (PRLAs) that remain from the pre-1976 prospecting permit-preference right leasing system. The Department has adopted a work program which will process these remaining PRLAs to the point of decision by July 1986.

The 1982 changes to the coal leasing program provide many benefits over the old program, particularly in the following areas:

A. Economics

- Continued leasing keeps the value of leases competitive and prevents industry from gaining windfall profits on old leases which would result from restricting the market.

- New leasing reduces speculation via lease transfer or reassignment because industry or supply contractors can now shop competitively in the marketplace for new leases.

- By offering leases competitively and requiring industry to submit sealed bids, the new program forces industry to disclose what they are willing to pay and helps ensure receipt of fair market value.

- By discontinuing the practice of leasing as a monopolist, the Federal Government may help reduce the price of electricity and manufactured goods.

- The leasing program provided $152 million in bonus revenues from January 1981 to October 1983 and $154 million in royalty revenues in FYs 1981 through 1983. These revenues are shared 50/50 with the States.

B. Environment

- Accelerated leasing with new environmental safeguards and stringent diligent development requirements prevents long-term speculation by industry and allows environmentally preferable coal leases to compete

with older leases that do not comply with current environmental standards. Consequently, the costs associated with environmental damage are minimized.

° All new leasing has environmental safeguards. Environmental impact statements are prepared for:

- Program development and adoption.

- Resource management plans or land-use plans for regional coal sales prior to sale.

- Mine plans submitted for review and approval.

- Reclamation plans modified to reflect changing technology.

° New coal leases with environmental safeguards compete with old leases that were issued prior to new environmental standards.

° The current program has more stringent mitigation standards and requirements than ever before.

° New leasing allows clean burning low sulfur coal to compete with lower quality coal.

C. Public Participation

° New leasing is done with full disclosure and full public participation through the planning and EIS processes.

° Governors are consulted and the Secretary publishes his reasons for accepting or rejecting the Governor's recommendations.

° Regional coal teams are established to oversee the leasing program and provide an open forum for public participation. Recommendations developed at the local level guide the program.

° Planning and EIS processes are developed openly to provide full disclosure to the public and provide opportunity for the public to make comments and recommendations.

D. National Economy

° Developing domestic coal resources provides for employment in America rather than in foreign countries. Specific industries directly affected are mining, transportation (e.g., railroads), electric utilities, steel and metals, and heavy equipment manufacturing. Industries indirectly affected include automobile manufacturing, light equipment manufacturing, and construction trades. Local economies also directly benefit.

- Coal development can displace imported fuels currently used for power plants or heat processes thereby improving national economic strength by reducing imports.

- Reducing costs at home through competitive markets improves America's ability to compete in foreign markets and with foreign manufacturers in American markets.

E. National Security

- Accelerated leasing and development of domestic resources reduces America's dependence on unstable foreign imports.

- Coal can displace fuel oil in areas such as electricity generation or other heat processes and thereby substitute for an energy source where we have hundreds of years of reserves rather than remain dependent on an uncertain foreign supply.

- Synthetic fuel development for national security is dependent on new coal leasing.

In summary, the Federal Coal Management Program attempts to ensure that adequate supplies of uncommitted coal reserves are maintained so that the most competitive source of coal production can be found and developed for the benefit of the American consumer.

This report examines the background and history of the Federal Coal Management Program. Specifically, it provides an analysis of vital issues which center on the environment, the economy and the role of the Federal Government as a monopolist, public participation, national security, jobs, and revenues from the program.

II. FEDERAL COAL LEASING

The Department's objective in providing broad offerings of Federal coal leases is not to create a surplus or shortage of coal resources on the market, but to lease sufficient coal resources to allow for efficient coal development. Coal resources that are not leased are not available to compete for contracts to supply coal to coal users. The Department wants to be certain that enough coal is leased to ensure that the market for coal supply contracts will be fully competitive.

Since 1979, the General Accounting Office, Council on Wage and Price Stability, Department of Energy, and Department of Justice, as well as private consultants working for these agencies, have vociferously argued for this policy based on their concern that a restrictive leasing policy would have the effect of increasing coal prices to consumers. (See Appendix A.) Their reasoning contains two key elements. First, coal is not a homogeneous commodity; therefore, it is essential that coal resources that can be produced most efficiently for each user be available, i.e., under lease. Second, to insure adequate competition, there must be a sufficient number of producers to meet the needs of each individual coal user.

Monopolist

When a commodity is demanded in a perfectly competitive market, the market will respond by satisfying that demand in the most cost efficient manner. As is already recognized, the coal market is not perfectly competitive, most notably because of the monopoly power of the government. In the case of the coal market when coal is demanded, the market will respond by satisfying the demand in the most cost efficient manner available. Unleased Federal coal that is not available cannot compete to satisfy the market demand. With the Department's extensive land-use and activity planning process, it can take 4 years to bring a Federal coal tract to the point that it can be offered for lease. This is far too long a lead time to respond to market forces. The Department recognizes its inability to know what the exact future coal demand will be and which tracts are the most cost efficient to meet that demand.

The market's ability and central planning's inability to allocate resources effectively is well documented. In response to this, the Department has made a conscious decision to minimize the government's role in allocating coal resources. Within the confines of the Treasury receiving fair compensation for the resource, protection of the environment and concerns raised by the State Governors, the market will be allowed to determine which tracts will be available to compete for satisfying the demand for reserves.

If the Department restricts the quantity of coal resources offered, higher prices (bonus bids) could be obtained by the Federal Government because it has the ability to act as a monopolist in the market for coal resources (the Federal Government owns approximately 60 percent of western coal resources and controls another 20 percent by virtue of its land ownership patterns). The demand for coal would be satisfied in the market place without Federal coal leasing. However, the demand would be satisfied at a higher cost to the consumer. Therefore, a policy of restricting supply by restricting the quantity of coal resources offered for sale would not be in the public interest.

By restricting Federal coal leasing, the western supply of available resources is potentially reduced by 80 percent. As with any commodity, when coal resources become reflectively scarce (not available) the price will increase. With less coal available and less competition among the coal suppliers (coal companies), utilities will pay higher prices for the coal. The higher cost to the utilities is then passed on to the consumer. The cost to the consumer will also be increased under a policy of restricted leasing in situations where the unleased Federal resource is the most cost effective to develop; Development of coal resources will occur to meet the consumer demand; however, it will occur on tracts that have a higher development cost.

The point of shifting development intra-and interregionally is very significant. Quantifying the exact shifts and the associated cost to the consumer is impossible to accurately estimate. The next section, "Production Goals," points out some of the weaknesses in attempting long range modeling of coal supply and demand, of which development is a component. Section VIII ("Development Prospects of Existing Federal Leases") does discuss the Department's view of the future for each of the coal regions and the tentatively scheduled FY 1984 and 1985 sales. However, these estimates are not on a leased tract by tract basis, much less a detailed discussion of private and unleased Federal coal tracts.

Production Goals

Even in situations where the intent is not to restrict Federal coal leasing but to tailor the supply to the projected need, there are high costs to the consumer. This "one-to-one" approach relies heavily on the accuracy of the projection tools utilized by the government. It can take 4 years for the government to offer a tract for lease and up to 7 additional years for a company to bring a large western coal mine into minimal production. This forces the government to project at least 10 years into the future with pin-point accuracy.

Estimating with any degree of accuracy the U.S. and world energy supply and demand for just a few years is next to impossible. Yet what is required in a tailored "one-to-one" approach to Federal coal leasing is to make projections 10 years into the future, plus identify the least cost tracts and match the potential consumers with those least cost tracts. Any inaccuracies or miscalculations in any of these requirements leads to the same results as restricting the available supply -- higher costs to the consumer.

Under the Federal Coal Management Program introduced in June 1979, the Department of Energy (DOE) set production goals for western coal regions. The Interior Department then estimated the amounts of coal that would be forthcoming from non-Federal sources and existing Federal leases -- and thus would not depend on any further Federal coal leasing. If this already available coal production capacity fell below the DOE production goal for a region then new Federal leasing would be required in the region to make up the "shortfall".

Unfortunately, the precision called for in this procedure strained government projection capabilities. Production goals varied substantially as expectations for future coal production shifted. As an extreme example, DOE projections for U.S. coal to be used in synthetics production in 1990 went from 55 million tons in 1978, to 28 million tons in 1979 and then up to 198.3 million tons in 1980. Estimates of already available production capacity also proved highly variable.

Reflecting these concerns, the General Accounting Office, in 1980, and the Antitrust Division of the Justice Department, the Council on Wage and Price Stability and the Department of Energy (DOE), in 1981, called for modifications in the DOI leasing approach to allow greater leasing. (See Appendix A.)

Leasing Levels

In 1981, the Interior Department shifted the emphasis in coal leasing from exact government planning to responding to the market. The problems of trying to supply exactly enough leases to meet some specific production goal was overcome by that approach. Under this change in philosophy, an adequate inventory of uncommitted Federal coal reserves will be maintained, allowing new coal buyers to select from leased reserves held by a number of different coal mining companies and located at alternative sites. The resulting competition among Federal lessees to obtain new contracts will result in lower prices for utility and other new coal buyers; it will also give new coal buyers more leeway to find the lowest cost mining and transportation sites and the types of coal which best meet their specific needs. In short, new leasing is called for whenever there is a need to replenish the inventory of existing nonproducing and uncommitted leases available for new production commitments. The market, not the government, will then determine the attractiveness of these new and uncommited leases and when and to what degree they will be brought into production.

There is no easy mechanical formula for determining the correct level of uncommitted leased reserves to provide adequate industry competition and adequate mining-site selection alternatives. The Interior Department considers numerous factors in making the leasing level decision. One key factor is the extent to which previously leased reserves are already committed to existing mine plans and thus would be unavailable to form new mines or to expand the area of an existing mine. Another factor is the projection for future coal production (1990 and 1995) in each coal region. This information can be translated into an expected rate of new contracting, which will have to draw upon an existing inventory of already leased but still uncommitted and available Federal coal reserves. Expressions of interest by industry indicate the potential demand for new mine sites or expansion of existing sites. Environmental concerns about particular sites or the impacts of cumulative coal development levels in a region may require that the levels of coal leasing be limited in certain areas and/or for the whole coal region.

The Interior Department examines all the factors affecting the inventory level of uncommitted leased Federal reserves that it seems desirable to maintain. Reflecting the considerable uncertainties, a range of possible leasing levels is developed. This range is developed in close consultation with regional coal teams, which include government representatives of affected States. Federal and State officials have been able to reach basic agreement in all past coal lease sales and have worked very closely on the preparations for the upcoming sales (see Appendix B, Tables 1-a, 1-b, and 1-c).

In an effort to avoid restricting the supply of reserves available to satisfy the demand for coal reserves, the Department approaches each sale with a large supply of reserves early in the process. The concept of leasing levels is based on the idea that the Department will give companies the opportunity to bid on a wide range of coal tracts. The leasing level is the first cut at what may eventually be offered for lease. However, the proposed action alternative in the regional EIS must fall within the leasing level range. Before giving companies the opportunity to compete for the resources, the coal tracts to be offered are evaluated in a regional EIS. After the EIS is completed, tracts that are not desirable for leasing are not recommended by the RCT and are removed from the tracts to be offered for lease. Surface owner consent and other factors will normally further limit the the actual quantity of reserves to be offered for lease below the original leasing level.

Market Demand

The Department's objective was to provide for leasing sufficient quantities of coal resources to allow for efficient development. To do this, the Department felt that it should respond to the market demand for coal reserves. Market analysis by the Department, industry's expression of interest and, most significantly, the price the Department is receiving for the resources all indicated that the market demand for coal resources has remained relatively stable.

In responding to the market in this manner, the Department recognized that not all tracts offered will be leased. It also recognized that not all leased tracts will be returned to the Department's control under the diligent development provisions mandated by Federal Coal Leasing Amendments Act of 1976.

An effective way to monitor market demand in order to determine what is the appropriate quantity to offer for lease is to observe the prices the in situ coal resource is receiving in the market place. An oversupply or undersupply of coal resources on the market will manifest itself in a dramatic drop or increase in the prices (bonus bids) the Department receives for its coal resources (see Appendix B, Tables 2-a, 2-b).

Two common ways of evaluating the bonus bids to assess the compensation received are on a per acre and per ton basis. A per acre measure has the obvious disadvantage of being a measure of the surface acreage with little relationship to the coal that lies beneath. Analyzing the price on a per ton basis is a somewhat better measure. However, coal resoures are not homogeneous commodities. The most significant difference is the energy value (BTU) of the resource. Commonly leased Federal coal resources range from a low of 7,000 BTU's per pound in the Fort Union Coal Region to over 14,000 BTU's per pound in the Uinta-Southwestern Utah Coal Region.

An analysis based on cents per BTU captures this BTU difference but does not address many of the other significant differences. The best measure for capturing all these differences is the price in the market place that the mined coal itself brings (the FOB mine price). For example, mined coal that has relatively high BTU and low sulfur content will generally receive a higher price in the market place than coal that has a relatively low BTU and high sulfur content. The market price captures, at one time, all the characteristics that add to or subtract from the value of the mined coal.

Appendix B, Table 2-b, the last column, gives the average high bonus bid for the resources as a percentage of the current mine mouth selling price of coal for the regions where lease sales have been held. For the three larger western sales held to date, the average high bonus bid stated as a percentage of the current selling price of mined coal has remained relatively constant (between .5 and .7 percent of the current market price of the coal). This has occurred in spite of the variation in average BTU content (a low of 8,000 BTU's per pound in the Powder River Region and a high of 14,000 BTU's per pound in the Uinta-Southwestern Utah Region), and the chronology of the sales, with the first Green River-Hams Fork sale in January 1981 and the last Powder River sale in October 1982.

Previous analysis of the Department's sales have commonly utilized cents per ton as the unit to compare the bonus bids. This has lead to a significant amount of criticism of the recent regional coal lease sales, most specifically the first round Powder River regional sale, as examples of overleasing. Analysis of sale results on a cents per ton basis can be very misleading. (The average consumer would not be deceived into believing a pound of T-bone steak should cost the same as a pound of round steak, even though they are both beef products.) The price that a ton of mined Powder River coal can bring in the market place ($7.50 per ton) does not compare with the price Uinta mined coal can command ($28.00 per ton). Given this difference in mine mouth value of the coal, it is only reasonable to assume that the value of the coal resource before mining is also not identical.

By evaluating the sale results for the three Western sales held from January 1981 through October 1982 on a percentage of market price basis, it is clear that overleasing is not occurring. Actually, a case can be made that the opposite is quite possibly true. In the Southern Appalachian Region, Federal coal is a very minor fraction of the total available coal resources. The Department has no monopoly power in this region and must take the market rate for its coal resources or not lease it. As Table 2-b, Appendix B, shows, the average high bonus bid as a percentage of price is very low (.076 percent) in the one region where the Department's sales cannot significantly influence the market price for coal resources. This information could actually imply that the Department is still underleasing in the western regions and collecting monopoly rents.

Two other factors that should be considered in assessing coal resource demand are market analysis for each coal region done in conjunction with formulating the regional leasing levels and industry's expressed interest in leasing coal (see Appendix B, Table 1-a). The projected coal needs, along with other factors, are considered in setting the regional leasing level for analysis in each region's EIS. The RCT's recommended leasing levels indicate a significant need for coal reserves in these 5 regions. From the analysis of the leasing levels, the leasing needs for these regions could be from 3 to 11 billion tons of recoverable coal reserves above the already available capacity (see previous discussion on leasing levels).

Industry's formal expressions of leasing interest also indicate a high level of potential demand for coal reserves. Through this expressions of interest process, companies have indicated a desire to lease or to have offered for lease 5.7 to 9.7 billion tons of additional recoverable coal reserves in the next few years. Most of this additional coal is expected to be used to supplant less economically and environmentally desirable coal resources that are already under lease (see section VIII for further discussion). The new leased tracts would have a better chance of being mined because they have economic, environmental and locational advantages over many of the older leases. The old leases on the less efficient tracts would eventually be relinquished.

Compensation and Allocation

Since the early 1970's, some individuals and organizations have been concerned with the sale of Federal coal development rights without adequate compensation. Many of the requirements in the Federal Coal Leasing Amendments Act of 1976 (including only competitive leasing, changes in the royalty and rental rates, and stricter enforcement of diligent development requirements) were included to address this concern over adequate compensation. The inability to resolve this compensation issue, plus that of resource allocation, have hampered the Federal Coal Management Program for many years.

The Federal Government, as lessor, receives compensation for its coal leases in several ways. Direct compensation is received in the form of royalties on coal production, annual per-acre rental payments, and cash bonus payments. Where the lessee obtains above normal returns after making these payments, additional compensation is provided to the Federal Treasury in the form of higher corporate income taxes.

The royalty and rental rates are fixed prior to the lease sale. Royalty is specified in the notice of lease sale. For surface mines it is not less than 12 1/2 percent. Royalty for underground mines is not less than 8 percent except for special circumstances where it may be as low as 5 percent. The rental fee is specified in the lease and is not less than $3/acre. If the diligence requirement is not met, the lease automatically terminates by law (Section 7A of FCLAA). Generally, for tracts which will go into production in time to meet the 10 year diligence requirements, the royalty payment will capture the greatest portion of the lease revenues obtained by the government. Once diligence is achieved then the continued operations requirement must be met. The payment of advance royalty can take the place of the continued operation requirement. Once the production meets continued operations, any payments are credited up to the total amount of advance royalty that was paid.

The Department's fair market value (FMV) policies ensure that the cash bonus payment captures for the government a fair share of the lease value which remains after accounting for the lessee's royalty and rental obligations. This is in accordance with the Uniform Appraisal Standards for Federal Land Acquisitions (Interagency Land Acquisition Conference, 1973) which defines "FMV" as "the amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would be sold by a knowledgeable owner willing but not obligated to sell to a knowledgeable purchaser who desired but is not obligated to buy."

Prior to August 1976, allocating the resource took two basic forms -- competitive and non-competitive leasing. In 1976, Congress required that all leases be acquired competitively. With a few exceptions, competition has been in the form of bonus bids at auctions. The current procedures for Federal coal lease sale offering's and FMV determinations are set forth in the Secretarial Issue Document of July 22, 1983. Prior to the

III. HISTORY AND BACKGROUND

The current structure of the Federal Coal Management Program is the result of a series of events that began in 1970 and included direction from the three branches of the Federal Government. In 1970, a BLM study revealed that Federal coal leases were being obtained for speculative purposes and that production from leased Federal lands was inconsistent with the number of acres under lease. To illustrate, in 1945, 80,000 acres were under lease providing 10 million tons of coal annually. By 1971, acreage under lease increased to 800,000 but production had decreased to 9.1 million tons annually.

Moratorium 1971 - 1973

As a result, an informal moratorium was placed on new leasing in 1971 and, in 1973, a formal moratorium was instituted which allowed new leasing only to meet short-term needs. Issuance of prospecting permits was also suspended, and a new long-term leasing policy development effort was begun (including the preparation of a national programmatic EIS).

In 1974, a draft EIS describing the Energy Minerals Allocation Recommendation System (EMARS I) was published. The final EIS was released in 1975 but the preferred program was retitled the Energy Minerals Activity Recommendation System (EMARS II). The EMARS II program was adopted as policy in January 1976 and final regulations were published in January 1977. This policy, which was heavily dependent on industry and public nominations to identify the need for tracts for development, lifted the moratorium on new major Federal coal leasing. The limited short-term policy was to remain in effect until a new competitive system was fully operational.

NRDC Lawsuit

Shortly after the adoption of EMARS II as Departmental policy, a lawsuit was filed by the Natural Resources Defense Council, Inc. (NRDC) -- NRDC et al., v. Royston Hughes et al., 437 F. Supp. 981 (D.D.C. 1977). The NRDC alleged that, because of certain defects, the 1975 final coal programmatic EIS was legally inadequate. Specifically, it was charged that the EIS did not adequately describe the coal leasing program, it did not consider proper alternatives, it was done in a manner which deprived the public of an opportunity to comment on the proposal, and it failed to consider whether there was a need for resumption of Federal coal leasing.

On September 27, 1977, the U.S. District Court for the District of Columbia ruled that the EIS was inadequate, and the Department was therefore in violation of the National Environmental Policy Act (NEPA). Accordingly, the Department was enjoined from implementing the EMARS leasing policy with two very limited exceptions for short-term leasing. In addition, the Department was directed to prepare a supplement to the coal programmatic EIS to meet the NEPA requirements.

New Legislation

During 1976 and 1977, legislative action also occurred that impacted the design of the Federal Coal Management Program. In 1976, the Federal Coal Leasing Amendments Act, which established specific rules to guide the development of Federal coal (including competitive leasing), was passed. In that same year, Congress enacted the Federal Land Policy and Management Act requiring that the Bureau and the Department ensure that all resource development decisions related to the public lands, including coal leasing, are made in cooperation with State and local governments as part of a comprehensive planning process. In addition, the Surface Mining Control and Reclamation Act of 1977 requires the Secretary to review Federal lands to determine whether they contain areas which are unsuitable for all, or certain types of, surface coal mining operations.

In 1977, a coal policy review was conducted within the Department, and it was concluded that a new programmatic EIS would be prepared to fully consider the new legal requirements and to respond to the court order. The Department filed an appeal to the NRDC v. Hughes decision (NRDC v. Hughes, 454 F. Supp. 148 (D.D.C. 1978)) while pursuing a negotiated settlement with NRDC. The negotiated settlement, which was adopted as the June 1978 amended court order, allowed more flexibility to issue coal leases to meet certain "short-term" needs until a new coal leasing policy could be established if, in fact, there was a need for the coal.

The result of the coal policy review was a new programmatic EIS published in April 1979, the adoption of a new comprehensive program in June 1979, and the issuance of final program regulations in July 1979. The regulations were revised in July 1982 to streamline the leasing process and make it less burdensome on the industry, the public, and the government. In January 1983, interim final rules were published to clarify the role of the regional coal teams and to further identify areas for Department/State consultation in program decisions. In September 1983, the regulations at 30 CFR Part 211 were added to the regulations at 43 CFR Group 3400 to reflect the BLM-MMS merger.

Congressional Moratorium

In appropriating funds for the Department's continued operation during FY 1984, Congress imposed a moratorium on holding Federal coal lease sales or issuing Federal coal leases, except for emergency leasing, lease modifications, or Congressionally authorized lease exchanges. This moratorium was included as a provision of the FY 1984 Appropriations Act for Interior and Related Agencies, Public Law 98-146. The moratorium is scheduled to last until 90 days after the Commission on Fair Market Value Policy for Federal Coal Leasing submits its report to Congress, i.e., the moratorium will be in effect at least until May 17, 1984.

In addition to exempting emergency leasing, lease modifications, and Congressionally authorized lease exchanges, three Federal coal maintenance tracts were allowed to be offered for lease: the Paonia D coal bed tract in

the Uinta-Southwestern Utah Coal Region and the Colstrip Area C and Colstrip maintenance tracts in the Powder River Coal Region. The Paonia D tract lease was sold on February 16, 1984 for $1,950/acre ($9.5 million). The Colstrip tracts may not be offered for lease before August 1984.

As of February 17, 1984, two emergency coal lease sales, specifically exempted from the moratorium, had been held. A third sale is scheduled to be held on March 8, 1984.

Fort Union Sale and Suit

On August 3, 1983, the House Interior Committee passed a resolution invoking the emergency withdrawal provisions of the Federal Land Policy and Management Act for all 27 tracts considered for coal leasing in the Fort Union Coal Region. The Secretary decided not to make the withdrawal because, based on the environmental reviews that had already taken place, he was certain that no emergency existed. Rather than issue a withdrawal order, the Secretary notified the Interior Committee Chairman that he considered that the resolution conflicted with the Supreme Court decision in Immigration and Naturalization Service vs. Chadha.

On September 8, 1983, the National Wildlife Federation and the Wilderness Society filed suit to stop the Fort Union coal lease sale scheduled for September 14, 1983. The sale was held as scheduled, with five tracts receiving bids. Four of the bids were accepted. On September 28, 1983, the court enjoined the Department from issuing leases for the four tracts. The court subsequently modified its injunction to permit emergency leasing, thus allowing the reoffering of one of the tracts, which was sold in December 1983.

The court ruled on the suit on January 9 and January 10, 1984. The court ordered the Department to refrain from issuing the Fort Union coal leases until (1) the committee revokes its withdrawal resolution, (2) Congress repeals the statute which gives the Committee its power to order the Secretary to make emergency withdrawals, (3) the resolution expires at the end of 3 years pursuant to statute, or (4) the Department revises its emergency withdrawal regulations to delete the provision requiring the Secretary to make a withdrawal when notified to do so by Congress.

Existing Federal Coal Leases

As of February 24, 1984, 634 Federal coal leases had been issued. Of those 634 leases, 126 leases were reported to have paid production royalties in FY 1983 (see the "Production and Royalty", section VII) on a total of 17.74 billion tons of Federal coal reserves covering 948,783 acres under lease. Appendix B, Tables 4-a and 4-b present total recoverable reserves under lease by State and coal region.

Appendix B, Tables 4-c and 4-d give the acres under lease by State and coal region as of January 16, 1984. The States of Utah, Wyoming, and Colorado contain approximately 76 percent of the leased Federal acres and 85 percent of the recoverable reserves.

For recent regional leasing activity, see Section VI.

IV. COMPONENTS OF THE REGIONAL LEASING PROCESS

In April 1979, the Department of the Interior released the final programmatic EIS for the Federal Coal Management Program. The programmatic EIS assessed the national impacts of the coal program and related Federal coal policies. That statement covered all major national aspects of the preferred program and alternatives and assessed the effects of the alternatives in twelve specific coal regions. The programmatic EIS also examined the question of the need for Federal coal leasing to meet the Nation's future energy needs. Since there was a demonstrated need for leasing, the Federal Coal Management Program with its regional leasing process, was adopted and is primarily directed toward issuing new leases.

Land-Use Planning

The land-use planning process identifies areas acceptable for further consideration for coal leasing. These areas are identified after placing all lands in a planning area through four screens that are integral to the planning process.

1. Areas are eliminated from coal development consideration if they do not have coal potential.

2. Additional coal areas are eliminated if they are judged unsuitable, using the 20 unsuitability criteria.

3. Additional coal areas may be eliminated on multiple-use grounds if other resource values are determined to be superior to coal.

4. Surface owner consultation may also result in the elimination of lands from further consideration for leasing.

Activity Planning

Activity planning for coal in the planning area follows completion of the land use plan. Under the program, coal resource activity planning is conducted by the Bureau of Land Management and involves a call for expressions of interest, the establishment of leasing levels, the delineation, ranking, selection, and scheduling of tracts for lease sale from the land identified in the land-use plan as areas acceptable for further consideration for leasing. A regional EIS is prepared during activity planning and is the NEPA analysis for the proposed sale. Participation of State and local governments is actively sought during this phase. Before making a final decision, the Secretary consults with the Governors of the affected States. This final decision includes how much coal reserves to offer, which tracts to offer, and when to hold the lease sale(s).

During activity planning regional leasing levels are established by the Secretary, who relies on the advice of affected State Governors in ensuring that leasing levels have properly considered social, environmental and economic impacts and constraints. The regional leasing level is used to guide and initiate the preparation of the regional EIS. The proposed action alternative in the EIS must fall within the leasing level range.

Coal Lease Sale Procedures

At the beginning of FY 1982, interim competitive coal lease sale procedures were in effect which required $100 an acre minimum bid for consideration, sealed bidding, published presale representative market values for maintenance tracts and postsale evaluations (tract appraisals) for determining whether fair market value (FMV) was being received for each tract. These postsale sale deliberations were based on two tests. The first consisted of the number of bidders and tract competitive characteristic's test to determine if bid acceptance on a tract was possible based on competition alone. The second test was an appraisal or reservation price test for those tracts not found competitive to determine if bid acceptance was possible because the bid exceeding a comparable-sales-based appraisal.

These two tests determined the recommendations to the sale panel by the evaluation teams pertaining to whether to accept or reject bids for tracts. Provisions were also included for noting special circumstances like bypass tract status in the evaluation team report which the sale panel could consider in its recommendation to the State Director on tract bid acceptance.

Public comments were requested on these interim procedures (47 FR 40242, 9/13/82). The replies were quite diverse but two types of comments were common. First, many felt the procedures were too subjective, confusing and potentially subject to abuse. Second, the public comments indicated that most coal tracts were likely to have a single dominant bidder who had a neighboring mine or who was blocking up a new mine including the Federal tract. This raised questions about how to ascertain the competition required for bid acceptance on a competitive basis.

A review and options analysis was undertaken by BLM and the Department concerning the public comments and alternative new sale evaluation procedures. The deliberations resulted in a July 1983 Secretarial Decision in which the Secretary selected final lease sale tract evaluation procedures (48 FR, 36007, 8/8/83). These final procedures were implemented in detail in the September Fort Union coal lease sale. These new procedures provide for a $100 per acre minimum bid for all tracts with no presale release of the BLM appraised value of any tracts. They also provided for a documented presale evaluation or appraisal of each tract with tight security control for these estimates. In the postsale period, these procedures provided

for possible postsale acceptance of a bid on a tract receiving two or more substantive bids larger than 1/4 the presale appraised value, if the high bid exceeds the average of the presale appraisal value and two or more substantive bids on the tract. High bids failing this test are rejected. Bids on the remaining one bid tracts and tracts lacking two or more substantive bids are then tested to see if they exceed postsale appraisal values which are based on newly accepted bids, if available, or the presale appraisals if not. Bids not passing this second test are recommended to the sale panel and the State Director for rejection.

Preference Right Lease Applications

A preference right lease application (PRLA) stems from a prospecting permit issued under section 2(b) of the Mineral Lands Leasing Act of 1920 (MLLA). Issuance of coal prospecting permits was discontinued by Secretarial Order #2952 of February 13, 1973. Congress repealed section 2(b) of MLLA upon passage of the Federal Coal Leasing Amendments Act of 1976. At the time of repeal, some 184 outstanding prospecting permits (now PRLAs) remained subject to adjudication by the Bureau.

BLM Processing Procedures and Schedules

In Natural Resources Defense Council, Inc., et al., vs. Berklund, 458 F. Supp. 925 (D.D.C. 1978), the court ruled that neither the Secretary's February 13, 1973, moratorium on the issuance of prospecting permits nor the Federal Coal Leasing Amendments Act of 1976 repealing section 2(b) of the Minerals Lands Leasing Act of 1920 restricted the rights of outstanding prospecting permit holders to obtain preference right leases. The Bureau is committed to processing pending PRLAs as soon as possible, consistent with existing statutes and policies for safeguarding the environment and conserving mineral resources.

The processing of PRLAs involves five basic steps:

1. The process begins with the applicant submitting an application for a preference right lease. The Bureau adjudicates the application to ensure that it has been filed prior to the expiration date of the prospecting permit, properly signed, accompanied by the first year's rental fee [1/] and accompanied by data relative to the discovery of commercial quantities (initial showing).

1/ Required rental fee at the time of PRLA filing was $.25/acre. Regulations now require a minimum of $3.00/acre before a preference right lease is issued. The applicant must therefore remit an additional $2.75/acre -- the difference between the two rental fees.

2. The Bureau evaluates the applicant's initial showing data and either reaches a preliminary determination that the applicant has discovered commerical quantities or issues a decision rejecting the PRLA for lack thereof.

3. If the initial showing is certified, the PRLA is evaluated for land-use planning needs, and a processing schedule is developed. This step also requires the Bureau to prepare an environmental document and conduct, as necessary, public meetings and hearings. In the interest of efficiency, the Bureau may group PRLAs under a single environmental document or include them in a regional coal EIS. The land-use planning/environmental documentation step culminates in the preparation of recommended lease terms and conditions, and bonding and diligence requirements.

4. The Bureau then requests the applicant to submit a final showing. This submission must contain vital financial and cost data to allow the Bureau to make a determination that the applicant has discovered commercial quantities of coal. Affirmative determinations establish that the applicant has a valid existing right to a coal lease. Final showings that do not show commercial quantities are rejected and no lease is issued.

5. As a final step, the Bureau issues coal leases where a valid right to such leases are established.

Outstanding PRLAs

Records indicate that, of 184 applications on file as of September 30, 1977, 13 leases have been issued covering 23 PRLAs; 24 applications have been rejected or withdrawn by the applicants; and 137 remain in various stages of processing (see Appendix B, Table 5). The 13 leases issued (covering 23 PRLAs) encompass slightly over 58,200 acres and contain an estimated 361.4 million tons of recoverable coal (see Appendix B, Table 5). As of September 30, 1983, there was no coal production from any of the 13 preference right leases. The PRLAs still being processed cover about 316,483 acres and contain an estimated 6 to 7 billion tons of recoverable coal (see Appendix B, Table 5). As of February 17, 1984, the breakdown of pending PRLAs was as follows: Alaska, 2; Colorado, 17; Montana, 4; New Mexico, 26; Utah, 12; and Wyoming, 76.

The Bureau completed a review of the coal PRLA program during FY 1983. As a consequence of the review, it was decided to prepare EISs for most pending PRLAs and to complete processing all pending PRLAs to a decision point as soon as feasible. According to the recently revised processing schedules, all these PRLAs will be processed to a decision point -- issuing preference right leases or rejecting the applications for failure to meet the commercial quantities test -- by October 1986.

Relationship of PRLAs to Regional Sales

Expected production from the PRLAs is considered in the baseline in establishing the regional leasing level. Treatment of the PRLAs in the regional lease sale environmental statement depends on each individual regional situation.

Leasing By Application

In addition, emergency lease applications are considered in cases where Federal coal may be bypassed or where coal is needed to continue existing production or meet existing contracts. Emergency leasing is exempted from the moratorium. The lease by application process can also be used without regard to emergency situations in areas outside of the designated production regions where limited Federal coal ownership makes activity planning impractical. Such lease sales are prohibited during the moratorim, however. Land-use planning, NEPA compliance, and competitive lease sales are required in these situations.

Other Provisions

In addition, the Federal coal regulations contain provisions relating to exploration licenses; coal lease exchanges; lease transfers, modifications, and readjustments; royalties; resource recovery and protection plans; and diligent development requirements.

V. COAL PROGRAM REVIEW

The revised coal management regulations published in the Federal Register in July 1982 (43 CFR 3400 and 30 CFR 211) and clarified by revisions published in January 1983 accomplished three objectives:

- Elimination of excessive, burdensome, and counterproductive aspects of the coal program;
- Promotion of the "good neighbor policy" whereby the Department encourages State Government and public participation in decision-making insofar as is legally possible; and
- Development of the publicly owned coal resources in a manner which is both environmentally sound and responsive to market demand.

Streamlining efforts began in February 1981 when interested State Governments and representatives of public interest groups, including energy companies, were asked by the Secretary to identify issues of concern. The analysis and study of the issues resulted in a number of changes to the Federal coal management regulations; a significant reduction in volume; expanded opportunities for State Government and public participation; earlier involvement of industry in the land-use planning process; and a stronger recognition of the importance of the publicly owned coal resources to economic health and national security.

The major changes from the July 1979 rules are presented below.

1979 RULES	1982/1983 RULES
A. Land-Use Planning	
- No special call for coal resource information was issued during land-use planning.	- BLM will issue a call for coal resource information during land-use planning to aid in early consideration of lands with coal potential.
- Leasing consideration was confined to acres containing high or moderate coal development potential.	- The restriction on only considering lands with high or moderate development potential is removed allowing all areas with coal development potential to be considered.

Purpose: More and better coal resource data earlier in the planning process and flexibility to meet the coal production needs of the region.

B. Leasing Levels

- Leasing targets were based on DOE's projections of national energy needs (demand for production, as well as other factors).	- Leasing levels will be based on various factors that may include demand for reserves, expressions of interest, advice from affected Governors, national energy needs, etc.
- The RCT recommended a single leasing target, usually a narrow range, to the Secretary.	- After receiving alternative leasing levels and a recommended leasing level from an RCT, the Secretary will set a leasing level in a broadly defined range.

Purpose: "Demand for reserves" represents a more market-oriented approach to approximating leasing levels than the "demand for production" approach with its fruitless attempts to closely match demand and supply.

C. Pre-Sale Consultation

- The Secretary consulted in writing with Governors in States where lease sales were proposed prior to making a coal lease sale decision.	- The Secretary consults in writing as before but also publishes in the Federal Register his reasons for accepting or rejecting their recommendations.

Purpose: Evidence of the Department's commitment to the good neighbor policy.

D. Unsuitability Criteria

- The rules established a series of 20 unsuitability criteria to be applied to lands being considered for leasing, to PRLAs, and to existing leases.	- Unsuitability criteria will no longer be applied to existing leases during land-use planning. The mandatory criteria will still be applied to these leases during mine plan review.

Purpose: Elimination of an unnecessary regulation, since the application on existing leases had nearly always been postponed until mine plan review.

E. Emergency Leasing

- Lease applicants had to meet certain criteria before being able to bid at emergency lease sales.	- The revised regulations eliminate the requirements that (a) a lease applicant have a mine in production 2 years before filing an application;

(b) a lessee be restricted to one emergency lease per operation; and (c) competition for leases sold under the emergency criteria be limited only to bidders meeting those criteria.

- State Governors were notified through the RCT of pending applications for coal lease sales.

- State Governors are doubly notified of pending lease-by-application actions -- through the RCT and separately.

Purpose: Following the intent of Congress that all coal be leased competitively; more evidence of the good neighbor policy.

F. Surface Owner Consent

- Surface owners determined to be unqualified under section 714 of SMCRA used the regular appeal channel through Interior Board of Land Appeals (IBLA).

- Surface owner appeals now go to the BLM State Director and then to the Bureau Director. Surface owners cannot appeal to IBLA.

Purpose: To speed up the decision process.

G. Alluvial Valley Floor Exchanges

- Alluvial valley floor fee coal exchanges were discretionary.

- Alluvial valley floor fee coal exchanges are mandatory rather than discretionary.

Purpose: Stronger recognition of the rights of lessees and landowners in areas located in alluvial valley floors. The changes make the regulations consistent with the court's decision in Texaco and NCA v. Andrus.

H. Lease Sales

- Competitive lease sales could be held by sealed bid only or sealed bid followed by oral auction.

- All competitive lease sales must be held by sealed bid only.

Purpose: The new approach has more assurance of the public's receipt of market value for the coal resource.

I. Diligence

- All nonproducing coal leases issued before August 4, 1976 (the effective date of the Federal Coal Leasing Amendments Act) had to be producing coal in commercial quantities by June 1, 1986.

- Pre-FLCAA lessees will have 10 years from the date of the first lease readjustment after August 4, 1976, to be producing coal in commercial quantities.

Purpose: To address the concerns that the 1976 rulemaking was a unilateral adverse change in fundamental lease terms (development obligations) and had a poor legal basis to be enforceable prior to readjustment of those leases. The 1986 deadline set forth in the 1976 regulations as the time requiring production for all pre-FCLAA leases may have resulted in many leases failing to meet diligence simply because the market could not absorb that much production by 1986. The Department would be left in the situation of cancelling leases which could not meet diligence in 1986 and then face a shortfall in Federal lease development in the early 1990's. Now, all leases will not be due to produce by 1986, but will be spread out between 1986 and 2005.

Consultation with Governors

On January 12, 1983, an interim final rule was published which amended the coal regulations (43 CFR 3400) modifying and clarifying provisions of the Department's regulations that were published in July 1982. The provisions primarily related to the consultation process between the Department of the Interior and regional coal teams (RCT) and procedures for appeal of surface ownership determinations made by the BLM. The amendments resulted from direct consultation between the Secretary and the State Governors in a meeting held in November of 1982 and a review of the comments on the proposed rules and experience gained. This rule was effective on the data of publication; however, public comments were accepted until February 28, 1983. The policy of close cooperation and consultation with State Governments will be enhanced by more explicit procedures for consulting with Governors of States affected by Federal coal leasing. These rules were republished without changes as final rules in August 1983.

Unsuitability Criterion Number 7

On December 7, 1983, the Department of the Interior published final amendments to the Federal coal management regulations (43 CFR Part 3460). The final rulemaking modified Unsuitability Criterion Number 7 for coal mining by amending §3461.1(g) of Title 43 of CFR to make it consistent with the unsuitability provisions of section 522(e) of Surface Mining Control and Reclamation Act of 1977 (SMCRA). Criterion Number 7 provides

that all publicly owned places on Federal lands which are included in the National Register of Historic Places shall be considered unsuitable. This shall include any areas that the surface management agency determines, after consultation with the Advisory Counil on Historic Preservation and the State Historic Preservation Officer, are necessary to protect the inherent values of the property that made it eligible for listing in the National Register. All or certain stipulated methods of coal mining may be allowed if, after consultation with the Advisory Council on Historic Preservation and the State Historic Preservation Officer, they are approved by the surface management agency and, where appropriate, the State or local agency with jurisdiction over the historic site. This criterion does not apply to land to which the operator made substantial legal and financial commitments prior to January 4, 1977; on which surface coal mining operations were being conducted on August 3, 1977; or which include operations on which a permit has been issued.

Organizational Merger

On September 16, 1983, the Department of the Interior published a final rulemaking redesignating regulations formerly at 30 CFR Part 211 to 43 CFR Part 3480 (48 FR 41589-41594). This redesignation reflected the merger of all onshore management functions of the Minerals Management Service, not related to royalty management, to BLM as a result of Secretarial Order No. 3087, dated December 3, 1982, and amended on February 7, 1983.

VI. COMPETITIVE LEASE SALES SCHEDULED SINCE JANUARY 1981

Since January 1981, a total of 14 competitive coal lease sales have been held in five of the six coal regions. As a result, 47 tracts covering 82,754 acres and containing 2.1 billion tons of recoverable reserves have been sold. Specific results for each region are described below. Also see Appendix B, Tables 1-a, 1-b, 2-a, and 2-b.

Southern Appalachian Coal Region

The first round of activity planning for the Alabama Subregion of the Southern Appalachian Coal Region began in July 1979. Tract delineation identified 27 tracts, of which 19 were offered and 13 were sold. This first round sale covered 10,000 acres containing 46 million tons of recoverable reserves. The total bonus bid was $1,051,281. Three sales were held in conjunction with the first round offerings in the Southern Appalachian Region. In the first sale, 6 tracts were offered and sold. Approximately 5,000 acres were leased containing 37.7 million tons of recoverable coal reserves. In the two follow-up sales, 7 tracts were sold containing 5,100 acres and 8.4 million tons of coal.

The call for industry expressions of interest for Round II leasing in Alabama closed in July 1982. Tracts were delineated by the end of October 1982, and tract profiles were available in January 1983. The 16 tracts delineated were ranked on February 9, 1983, by the regional coal team. On February 14, 1983, the leasing level of 42 to 117 million tons of Federal coal was established for use in the regional EIS. A draft EIS was filed on June 21, 1983, and the final EIS filed on December 2, 1983. The Round II coal lease sale was originally scheduled for May 1984, but because of the moratorium it has been tentatively rescheduled for July 1984 pending the outcome of the Department's response to the Linowes Commission report.

The Southern Appalachian RCT has recommended decertifying of the Alabama Subregion after the upcoming round of sales and thereafter offering Federal coal through the leasing-on-application process only. This recommendation was made in the interest of cost effectiveness.

Fort Union Coal Region

The first round sale of coal in the Fort Union Region was held on September 14, 1983. Eight tracts, five maintenance tracts and three new production tracts were offered for lease at the sale. Bids were received on five tracts covering 8,310 acres and containing 114.7 million tons of recoverable coal reserves. One of the bids was rejected and four were accepted. Because of the Fort Union litigation the Department is unable to issue any regional leases from this sale (see chapter III, Fort Union Sale and Suit). One of the tracts from the September 1983 sale, the North Beulah tract, was redelineated and reoffered as an emergency lease tract when the court modified its injunction to allow emergency leasing in the

Fort Union Region. The North Beulah tract, containing 1.83 million tons of recoverable reserves and covering 380 acres, was offered for sale in December 1983. One bid was received. The Round II sale is tentatively scheduled for June 1986. In early March 1984 the Fort Union RCT is scheduled to meet to recommend a leasing level to the Secretary for Round II.

Powder River Coal Region

The first round of leasing in the Powder River Region resulted in two sales held April 28, 1982, and October 15, 1982. In the April sale, 11 tracts received bids. One tract, Rocky Butte, was determined to have received a bid below fair market value and the bid was rejected. However, the Rocky Butte tract was reoffered and sold at the October sale, along with the Fortin Draw tract. These two sales culminated the effort started early in 1980 with calls for expressions of industry interest on three planning areas in northeast Wyoming and planning areas in south-central Montana.

The Powder River Region second round coal lease sale was tentatively set for January 1985. A leasing level of 1.2 billion to 4.85 billion tons for this second round sale was established for use in the regional EIS on April 29, 1983. The draft EIS was filed with the EPA on January 25, 1984, and the final EIS is scheduled to be filed in June 1984.

Green River - Hams Fork Coal Region

First round activity planning resulted in the first regional sale under the Federal Coal Management Program. A total of 11 tracts were sold in 4 sales, beginning in January 1981. All tracts offered were sold with a total of 35.7 million dollars bid. One tract in Wyoming, Red Rim, was held over for further study of reclamation potential and wildlife habitat under Unsuitability Criterion Number 15. A final decision on leasing the Red Rim tract will be made after a decision on an unsuitability petition on Federal and private surface is reached.

The second round regional coal lease sale was tentatively scheduled for September 1984. Twenty-four tracts, totaling 986 million tons of recoverable reserves are being analyzed. The leasing level of 500 million to 700 million tons of recoverable Federal coal reserves was established as the range for the proposed action alternative in the regional EIS. The draft EIS was filed on August 8, 1983, with the final EIS scheduled for filing with EPA in May 1984.

Uinta-Southwestern Utah Coal Region

The first round of coal leasing for this region resulted in 3 sales -- July 1981, February 1982, and May 1982. Eleven tracts were offered, all in central Utah; seven were sold. Approximately 19.6 million dollars were bid for the seven tracts, which contain 89.5 million tons of recoverable reserves.

The second round coal lease sale was scheduled for February 1984. The sale has been delayed because of the leasing moratorium and has not been rescheduled as yet. A leasing level of 1.6 billion to 2.1 billion tons of in-place coal was established for the region in March 1982. This is approximately .6 to 0.8 billion tons of recoverable coal reserves. Twenty-seven tracts (two in west central Colorado, five in southern Utah near Alton, and 20 in central Utah) were analyzed in the EIS, filed in October 1983. The maximum alternative considered in the EIS is .73 billion tons of recoverable reserves. Two of the 27 tracts have already been sold, one under the emergency leasing program and the other (the Paonia D seam tract) under an exemption to the coal leasing moratorium.

San Juan River Coal Region

The leasing target of 1.2 billion to 1.5 billion tons of in-place resources established in January 1982, was revised to 300 million to 400 million tons of recoverable resources, based on an RCT recommendation and other consideration. The first round coal lease sale for the San Juan River Region, scheduled for September 1984, has been delayed pending the resolution of wilderness issues in the region. The Bureau of Land Management is expected to complete its studies of the wilderness study areas in the region by the end of calendar year 1984.

A second draft regional coal EIS was filed with EPA in October 1983. The purpose of this second draft was to clarify environmental coverage of the 26 coal PRLAs in the region. The final EIS is scheduled to be filed with EPA in early March 1984.

VII. PRODUCTION AND ROYALTY

Production and royalties collected from Federal coal leases over the past few years are at a historic high. As of February 24, 1984, there were 634 Federal leases, containing 17.74 billion tons of recoverable coal reserves. Of these issued leases, 126 accounted for 56 million in production royalties in FY 1983, with production of over 105 million tons of coal. See Appendix B, Tables 3-a, 3-b, 3-c, and 3-d. In FY 1975, production was less than 44 million tons resulting in less than $4.9 million in royalties.

The compensation that the Federal Government received through royalty collections over the past few years has also never been higher. In FY 1982, the government collected 54 cents per ton from production from Federal coal leases, up from the 11 cents per ton collected in FY 1975. In FY 1983, this per ton production figure was 54 cents per ton.

Resource utilization, on a tons: produced-per-leased-acre basis, is also at an all time high (see Appendix B, Table 6-a). This high ratio of resource utilization persists in spite of the 84,151 acres leased in FY 1982. The concerns in 1970 of Government giveaways and long-term speculation, when utilization was less than 10 tons of production per leased acre, have persisted into 1983 even though utilization is over 111 tons of coal production for every acre under lease.

Production from Federal leases compared to total U.S. coal production has made marked increases in just the past few years (see Appendix B, Table 6-b). In Calendar Year 1982, Federal production represented 12 percent of the total U.S. coal production. In Calendar Year 1980, Federal production represented only 8 percent of total U.S. coal production.

These facts and figures indicate that leased Federal coal resources are being utilized at a dramatically increasing rate; long-term speculating is not occurring. Utilization of the Federal resource and compensation paid the Federal Government through royalties are at unprecedented levels. Although there are many positive indicators in the current resource utilization, this use is not the sole indicator of the need for additional leasing. Section II, Subsection on "Market Demand," discusses the need for future Federal coal leasing.

VIII. PROJECTIONS OF FUTURE LEASE SALES THROUGH FY 1985

For a discussion of future sales, a caveat is necessary to explain the anticipated sales estimates. Table 1-c depicts a regional coal lease sale schedule for fiscal year 1983 through 1988. All future sales on this schedule are tentative and used for planning and budgeting purposes only. The tonnage sold will depend on industry's response to the offerings and may range from zero to the entire amount of coal offered for leasing. The sale results can be affected by a number of factors, including changes in laws or regulations or in the economy.

Anticipated Results

The projections for the future sales are presented in Appendix B, Tables 1-a and 7. The following is a brief discussion of those numbers. The discussion will primarily center on the leasing level, available resources and anticipated sales. The final decisions on how much coal resources to offer for sale have not been made in any of these regions. The availability of recoverable reserves for the next lease sale represents the coal in the delineated tracts that has not been discarded for environmental or other reasons during the lease sale activity planning to this point in time.

In September 1983 leases containing 100 million tons of coal were sold but have not yet been issued in the Fort Union Region. If these are issued and there is a followup sale in FY 1984 or 1985, the Bureau expects total sales of about 300 million tons. Uncertainty regarding synfuels development is causing industry to delay acquisition of reserves as long as possible, particularly due to the 10-year diligence requirement.

In the San Juan River Region, the leasing level is 0.3 to 0.4 billion tons of recoverable coal reserves with 1.1 billion tons of recoverable reserves available. The Department anticipates selling about 0.3 billion tons. The sale figure will depend a great deal on industry's expectations of a future rail line into the San Juan Basin. The Secretary's recent decision to delay the regional sale until all WSA evaluations are completed introduced another element of uncertainty.

In the Uinta-Southwestern Utah Region, the leasing level is 0.6 to 0.8 billion tons of recoverable reserves, with 0.73 billion tons of recoverable reserves available. The Department's latest estimate is to sell approximately 0.5 billion tons of recoverable reserves. The demand for the high BTU, low sulfur coal in this region is still fairly high although current activity is slow.

The Southern Appalachian regional leasing level is 0.042 - 0.117 billion tons of recoverable coal reserves. The Federal share of the coal reserves in that region is only a small fraction of the total coal reserves. About 0.12 billion tons are available for leasing. It is expected that about 0.10 billion tons will sell. This will depend a great deal on the effects the economy and coal exports are having on the private coal reserves in the region.

The Green River-Hams Fork regional leasing level is 0.5 - 0.7 billion tons of recoverable Federal coal reserves, with 1.0 billion tons of recoverable reserves available. The Department currently expects to sell 0.4 billion tons. This is the second round sale for this region and new reserves will have to compete with already leased tracts in the market.

The Powder River Round II leasing level is 1.2 - 4.85 billion tons of recoverable reserves, with 7.3 billion tons recoverable reserves available. Currently, the Department expects to sell 1.5 billion tons but the uncertainties in Powder River are high due to its large market area and immense resources. These uncertainties are reflected in the large leasing level range adopted on April 29, 1983 for analysis in the regional EIS.

Appendix B, Table 7, gives the anticipated bonus bids for each of these sales. The anticipated bonuses are based on the above sale estimates and the estimates for average high bonus bids derived from recent regional lease sales. If these expectations hold true, approximately $187 million will be collected from these sales. As with the actual amount sold, the bonus bids are greatly influenced by market conditions and expectations at the time of the sale.

Currently, there are approximately 17.74 billion tons of recoverable Federal coal reserves under lease. By 1995, of these 17.74 billion tons of leased reserves, 8.0 billion tons will be committed to production, 5.0 to 6.0 billion tons have little or no development potential and will eventually be returned to the Federal Government because of diligent development requirements (see next section on "Development Prospects of Existing Federal Leases"), and 2.4 to 3.4 billion tons will be available to compete for future contracts. Also by 1995, of the estimated 6.8 billion tons contained in PRLAs, 1.5 billion tons could be in production. The remaining 5.3 billion tons will not be in production by 1995 and will be returned to the Federal Government because of diligent development requirements or will not make it through final showing to lease issuance. The 8.0 billion tons of committed reserves, plus 2.4 to 3.4 billion tons of uncommitted reserves and 1.5 billion tons from PRLAs plus the anticipated 3.1 billion tons to be sold in FYs 1985 and 1986, will put 15 to 16 billion tons of Federal coal under lease (either in production or available for production). This is 1.5 to 2.5 billion tons less than what is under lease today.

Development Prospects of Existing Federal Leases

The following discussion is a brief overview of the development potential of existing Federal leases. An Office of Technology Assessment (OTA) report published in December of 1981 and individual studies conducted by the Department in each of the regions are the major sources of information for this evaluation. In conjunction with the establishment of the regional leasing levels (targets), the Department reviewed the productive capacity of private and leased Federal coal (including PRLAs) for each of the coal regions where a lease sale is scheduled.

The OTA review concentrates on the five active leasing regions in the West. The remaining leases are generally scattered with most of these in Oklahoma and Alabama. Appendix B, Table 8-a summarizes the development potential of the 488 leases in existence in 1980 in the five western regions. The information for this table was extrapolated from the OTA report.

In the active leasing regions, about two-thirds of the pre-1981 leases are producing or have good production potential by 1995. These leases have a projected 1995 capacity of 411.0 to 444.7 million tons per year (Table 8-a). The Bureau's forecast of capacity from the new leases issued since 1980 in those regions is about 60 million tons per year. The capacity of existing Federal leases, (not including PRLAs) using these studies, could be 471.0 to 504.7 million tons per year.

Appendix B, Table 8-b summarizes the evaluation of the regional productive capacity conducted by the Department. The Alabama Subregion (Southern Appalachian Region) is omitted due to the small quantity of Federal coal in the region. The productive capacity and corresponding production estimates were done independently of the OTA study and include expected PRLA production. The total regional capacity, including production from Federal leases and non-Federal reserves and expected PRLA production, for the five regions is 534 to 546 million tons per year by 1995.

Fort Union Region

The low expectations for production in the region reflect the general nature of Fort Union coal more than specific problems facing individual leases. Besides the low BTU value, high moisture content, and large concentrations of impurities, Federal coal in Fort Union rarely occurs in contiguous units. Many of the leases face reclamation problems, and with mine-mouth consumption of the lignite coal being the most economical, air quality standards will become harder to meet. Most future growth in demand for Fort Union coal will follow the fortunes of the synfuels industry. Given today's conditions the future is not particularly bright for this industry.

The OTA estimate of Federal mine capacity by 1995 is about 32 million tons per year. The Department's estimate for total capacity is 40 million tons per year by 1995. The production forecast is 41 to 55 million tons per year by 1995. The Federal share of the total resources in the region is estimated to be 36 percent.

The range of both the Department's capacity and production estimates found in Appendix B, Table 8-b reflects the uncertainty about synfuels. The nature of lignite (relatively low BTU content) precludes transporting it any significant distance. Thus, there are significant coal resources that depend upon synfuel development. Mine mouth electricity generation will not make up the difference if synfuels do not develop by 1995. If synfuels are slow to develop, diligence may be a problem for a few existing leases and/or for additional leases.

Based on OTA estimates, approximately half of the leased Federal coal resources (0.28 billion tons), in 1980, have an uncertain or unlikely development future. Of the ten non-producing Federal leases in the region, OTA has categorized nine of them as having either uncertain or unfavorable development potential. The Department expects less than 0.2 billion tons of the current 0.25 billion tons of recoverable reserves under lease to be in production by 1995. Of the 4 PRLAs in the region (containing 0.4 billion tons) none are expected to be in production by 1995. Since completion of the OTA study, no new leases have been issued in the Fort Union Region.

Powder River Region

The Powder River region contains a huge volume of coal that can be produced at low cost. Its desirability as steam coal makes this the critical region as a source for that market. The production in the Powder River Region is very much affected by national economic trends as well as regional trends. Some of the forecasts showing immense increases in production in Powder River assumed large increases in the demand for electricity, synfuels, and exports simultaneously. While rapid economic growth will spur demand for energy in all sectors, economic growth depends a great deal on oil prices. If oil prices are low, then economic growth will be rapid, but the demand for synfuels will slacken while demand for electricity will increase. Low oil prices also mean lower transportation costs. As demand for Powder River coal depends very much on transportation costs, low oil prices will increase the demand for the region's steam coal. Thus, low oil prices will increase the demand for Powder River steam coal, but lower the demand for all coal as a synfuel feedstock.

The OTA estimate (Appendix B, Table 8-a) is for most of the Federal leases to have a favorable development potential in the Powder River Region. Approximately 11 leases did not receive a favorable assessment. However, these contain a relatively low amount of Federal coal (700 million tons of recoverable reserves). The major problem identified with these leases is their location in alluvial valley floors.

Since the OTA report was completed, 11 new leases have been issued. These new leases contain approximately 1.3 billion tons of recoverable coal reserves. The Department has determined that all these new leases have favorable development potential for 1995. However, the Department expects that 1.0 to 1.5 billion tons of leased reserves and as much as 80 percent (3.0 billion tons) of the PRLA reserves have little or no development potential by 1995. The major change from the OTA estimate reflects changed expectations for the synfuels industry. The Department has also estimated that, by 1995, the total capacity for the region will be 343 million tons per year. The anticipated results for the upcoming Powder River sale are for approximately 1.5 billion tons of recoverable reserves to be leased (see Appendix B, Table 7-a).

This additional tonnage will increase the productive capacity of the region by another 50 to 60 million tons per year for a total capacity of 400 million tons per year. As with the leases issued since 1980, these additional leases should have favorable production potential.

Appendix B, Table 8-b also includes production forecasts for the region. The production forecast for the Powder River Region is estimated at 180 to 306 million tons per year. The forecasts are based on analysis done by the Department, with the National Coal Model as the primary source of information. Market analysis done in conjunction with the leasing level process indicates a demand for an additional 0.5 to 4.0 billion tons of recoverable reserves.

Green River-Hams Fork Region

The uncertainty in the capacity forecast for this region demonstrates the marginal nature of some of the existing leases in this region. Due to transportation problems, environmental conflicts, or high mining costs these leases may not develop. In the OTA report, 101 Federal leases containing 2.0 billion tons of recoverable reserves were analyzed. Since 1980, 17 new leases have been issued in the region, containing approximately 0.6 billion tons of recoverable reserves. Approximately half of the tonnage leased since the OTA report was completed were from PRLAs.

The OTA study (Appendix B, Table 8-a) included 28 leases in the uncertain and unlikely category containing 0.84 billion tons of recoverable reserves. With the addition of the 17 new Federal leases, the figure in the uncertain and unlikely category may be as high as 1.0 billion tons. The major problem facing these unfavorable leases is that they are relatively small, isolated tracts with limited resources. Approximately half (0.1 billion tons) of the PRLAs are not expected to be issued.

The Department has estimated the total productive capacity for the region as 54 million tons per year by 1995 (Appendix B, Table 8-b). The production forecast is estimated to be 42 to 48 million tons per year. The Department's market analysis indicates a demand for an additional 0.2 to 0.7 billion tons of coal in the region. The anticipated tonnage that will sell in the Green River-Hams Fork Round II sale is 0.4 billion tons of recoverable reserves.

Uinta-Southwestern Utah Region

This region contains two distinct types of coal. The Uinta resource is very high BTU, low sulfur coal that in general is in high demand. The southwestern Utah resource is much lower BTU and has many transportation problems not encountered with the Uinta coal. Of the 117 Federal leases (Appendix B, Table 8-a) categorized as having uncertain or unlikely development potential, 96 are located in the southwestern Utah portion of the region. Almost 1.8 billion tons of recoverable reserves are contained in those 96 Federal leases that are not expected to be developed.

High mining costs, lack of transportation facilities, and potential impacts on nearby national parks, monuments, and other scenic and archeological resources are major obstacles that greatly reduce the likelihood or desirability of many of these leases' being developed. Over 0.5 billion tons of recoverable reserves in 61 leases are located on the rugged and isolated Kaiparowits Plateau. Production from these leases is uncertain due to the lack of rail service and established communities, high cost of underground mining, and potential environmental conflicts from development.

Since 1980, an additional 0.2 billion tons of Federal coal has been leased. Most of these leases are expected to have very favorable development potential. Of the 4.5 billion tons of Federal coal under lease in the region, over 3.1 billion tons are not expected to be in production by 1995. Of the estimated 0.1 billion tons of reserves held in pending PRLAs, none are expected to be producing by 1995.

For 1995, the total productive capacity for the region is estimated at 49 million tons per year and the production forecast is 32 to 36 million tons per year. This reduced forecast is based on lower expected demand and higher transportation cost than previous forecasts. This is also reflected in the estimated demand for reserves of 0 to 0.6 billion tons. The anticipated sales are for 0.5 billion tons of recoverable reserves (Appendix B, Table 7).

San Juan River Region

This region also faces transportation problems, possibly as severe as in Uinta-Southwestern Utah. No rail service exists into the San Juan Basin where much of this region's best coal is available. Rail access to the basin would expand the market base for basin coal to the large Texas market and other parts of the southwest. The estimated capacity and production forecasts both reflect this uncertainty. The demand for additional leasing mostly depends on the likelihood of rail lines into the basin. There are plans to offer this rail service; however, nothing has been developed at this point.

The OTA report identified six leases containing 40 million tons of coal as uncertain or unlikely for development. Since 1980, two new leases have been issued containing 1.2 million tons of recoverable reserves. The major unknown in the region is the 1.5 billion tons of recoverable reserves contained in the pending PRLAs. Many of the PRLAs are considered to have favorable development potential with approximately 0.6 billion tons likely to be production by 1995. However, the development of these PRLAs also depends on the availability of a railroad into the basin.

The Department's total productive capacity and production forecast for the region is based on the assumption that railroad service will eventually be available to the basin. The total capacity for 1995 is 48 to 60 million tons per year. The corresponding production forecast is for 32 to 42 million tons per year. If the railroad is not built, the coal demand forecasted for this region will shift to other regions. This shift may, however, entail higher costs which will be passed on to the consumer.

Based on the market analysis done in conjunction with the leasing level process, the demand for coal reserves in the San Juan Region is from 0.1 to 0.9 billion tons of recoverable reserves. The anticipated results from the next sale is for approximately 0.3 billion tons of Federal coal to be leased.

Regional Summary

As can be seen by this region-specific summary, each region is unique with its own problems. Fort Union coal reserves are generally constrained to on-site uses. The two major uses are on-site electrical generation and synfuels; both of which are not expected to grow rapidly in the near future. Powder River coal leases are the most inexpensive to produce, but that advantage can be adversely impacted by rising transportation costs. If transportation costs stay down, it can be expected that Powder River coal will eventually capture a much higher portion of the Nation's steam coal market. Green River-Hams Fork leases have a number of independent problems, including transportation, environmental conflicts, high mining costs, and tracts with limited coal resources. This is unlike the Fort Union and Powder River leases which have problems that effect essentially all coal in that region. The Uinta coal leases contain high BTU, low sulfur,

coal that is in relatively high demand. Southwestern Utah coal leases are not a factor in the coal market due to numerous problems. Most all Uinta-Southwestern Utah coal leases have fairly high mining costs associated with them. The major problem facing the San Juan leases is the lack of adequate transportation. The potential in the San Juan Basin is very great if a railroad is built.

Demand for Additional Coal Reserves

By simply substracting the production forecasts from the regional capacities presented in Appendix B, Table 8-b, the question of the need to lease additional coal reserves may be raised. The simple mathematics does not result in the demand estimates presented in the third column, Table 8-b, the leasing levels, Table 1-a, nor the anticipated sales figures in Table 7. The reasons are many and are presented throughout this report.

Paramount among the factors that create the differences between apparent need and projected demand was the Department's desire to allow the market place to address industry's demand for Federal coal reserves and not the government's projections of production goals (see Section II, "Federal Coal Leasing"). In the same section is a full discussion of the pitfalls of long-range projections of the national and regional coal production needs. Any inaccuracies in those projections that lead to underleasing have very high costs to the consumer. The Department also recognizes that demand exists to hold an inventory of coal reserves in a non-producing status. Each company faces a multitude of unknown resource needs; by having uncommitted coal resources on hand, each company has greater flexibility in dealing with these unknowns.

The Department, along with the GAO, the Council on Wage and Price Stability, the Department of Energy, and the Department of Justice, have recognized the need to provide sufficient supplies of coal to ensure competition within the industry. Lease offerings that exceed the minimal level required to meet the production needs allows for greater competition for utility coal contracts and increases the opportunities for new entries into the industry.

The Department wants to give industry the opportunity to supplant less economically and environmentally desirable coal leases that are currently under lease with new more desirable coal leases. Many of these older leases were issued before the current environmental laws were enacted. New leases that would be replacing these older leases have gone through multiple environmental screens and reviews.

As was stated earlier, if the demand for coal production exists the market will select the least-cost tract available to meet that demand. However, if the more desirable tracts are not availale (under lease), then less desirable tracts will be utilized.

Any new coal leases that replace unreadjusted old leases will also net a significant amount of additional revenues. Besides the bonus bid that would be collected, the royalty and rental rates are significantly higher on the new coal leases. As discussed in Section VII ("Production and Royalty"), the royalties collected in recent years have skyrocketed due to this change.

The idea behind the projected demands in Table 8-b, Appendix B, and the leasing levels in Appendix B, Table 1-a are to help guide the Department in how much coal should be offered for lease. A major key to the Federal Coal Program is to provide industry with the opportunity to lease coal. What is offered for lease is substantially less than the maximum leasing level; the quantity of coal leased is usually less than one half what is offered; and the number of leases that go into production is always less than what is leased. At each step, the market is not adversely constrained by previous Department decisions.

IX. COMMISSION ON FAIR MARKET VALUE POLICY FOR FEDERAL COAL LEASING

The DOI does not, at this time, have recommendations for major changes to the Federal coal program. This report does, however, provide a discussion of the Coal Commission investigating the Federal Coal Management Program. As the recommendations of the Coal Commission are reviewed by the Department, the Department's recommendations for future legislative, regulatory and program changes will be formulated.

In April and October 1982, the Federal Government, through the Department of the Interior, sold leases to lands in Montana and Wyoming that contain an estimated 1.6 billion tons of coal. The total bonus bid for the leases -- located in an area known as the Powder River Basin -- was $67 million.

In the weeks following the sale, criticism of Interior Department procedures and Powder River sale results mounted, amid widespread allegations that, by design or through incompetence, the government had realized far less than fair market value for the leases.

These criticisms include:

* Determining the amount of coal to be leased by meeting industry demands for reserves rather than providing sufficient quantities to meet coal production goals.

* Liberalizing the regulations for enforcing the provision in a 1976 law that placed strict requirements on companies to mine specified quantities of coal on leased lands or forfeit their leases.

* Granting the Interior Secretary more discretion in deciding whether to accept or reject bids for leases.

Regarding the Powder River lease sale itself, critics charged that:

* Interior was determined to hold the Nation's largest ever coal lease auction despite a weak coal market.

* The minimum amounts Interior would accept for the 13 tracts sold had been arbitrarily set at levels far below the fair market value that Interior is required by statute to obtain.

* Supposedly confidential presale estimates of value for the coal tracts had been leaked to the coal industry before the sale.

Congressional Investigations and Interior Department Response

The controversy surrounding the Powder River lease sale prompted two Congressional investigations.

In April 1983, the Surveys and Investigations Staff of the House Appropriations Committee issued a report concluding that:

* The Federal Coal Management Program primarily benefits leaseholders and surface rights owners, not the Federal Government.

* Interior proceeded with the Powder River lease sale in spite of poor economic conditions, a "soft" coal market, and potential lack of bidding competition.

* Interior sold the Powder River leases for some $60 million less than fair market value.

In May 1983, the General Accounting Office issued its report, which focused on receipt of fair market value in the Powder River sale, concluding that:

* Interior realizes less-than-reasonable return for Federal coal because it employs methods appropriate only for competitive sales, even though its leases are most often of interest to only one company..

* Continuing to offer captive leases under the mantle of competitive leasing only creates a pretense of competition and provides little assurance that a reasonable return for leased coal will be received.

* None of the Interior Department's reasons for discarding its original presale estimates of value for the Powder River sale as being too high could be sustained. Because the presale estimates of value were not used in deciding whether to accept bids, Interior sold the leases for roughly $100 million less then GAO's revised estimates of fair market value.

* The Interior Secretary would be wise to consider postponing further coal sales until the Department strengthens its procedures for estimating fair market value.

The Interior Department responded to these criticisms by instituting several changes in its criteria for accepting bonus bids. These changes largely remove the Interior Secretary's discretion in accepting or rejecting bids by basing acceptance solely on a mathematical relationship between bids received and appraised values.

Origin and Purpose of the Commission

Charges leveled in the two congressional investigations renewed and intensified the controversy over Interior's coal leasing policies and objectives.

To study the Federal Coal Management Program and resolve controversies surrounding Interior's leasing procedures, Congress established the Commission on Fair Market Value Policy for Federal Coal Leasing in Public Law 98-63, signed by the President on July 30, 1983.

The Charter required the Commission to:

a) Examine statutes, policies, and Interior's procedures to ensure receipt of fair market value from Federal coal leases.

b) Evaluate efforts to improve Interior's fair market value policies and procedures for the coal leasing program.

c) Recommend improvements in the statutes, policies, and procedures.

Congress later imposed a moratorium on Federal coal leasing scheduled to last until 90 days after the publication date, February 10, 1984, of the Commission's report.

The Commission met for the first time on September 6, 1983, at hearings held in Washington, D.C. Over the next four months, the Commission held hearings and business meetings on 18 days. Hearings were held in Washington, D.C., and in Denver. Oral testimony was presented by more than 100 witnesses, and four written statements were submitted for the record. Testimony and statements came from the full range of organizations and individuals interested in Federal coal leasing.

Two Commissioners toured Western mining sites for a firsthand look at Federal lands and coal production activities. Throughout its consideration of coal leasing activities, the Commission dealt with the Federal Coal Management Program as it is currently structured. Leasing policies and procedures no longer in effect, including those abandoned after the Powder River sale, were not addressed and were not a basis for Commission recommendations.

As directed by the Congressional Conference Committee report on the FY 1984 Interior Appropriations, the Commission did not consider environmental issues associated with coal leasing activities. These issues are being addressed by the Office of Technology Assessment.

Recommendation Of The Commission On Fair Market Value Policy For Federal Coal Leasing

Federal Coal Leasing Levels

1. The quantity of coal leased should be determined so the Government will receive a fair return consistent with the achievement of other public policy objectives, such as promoting efficient land use and environmental planning and conserving appropriate amounts of coal for the future.

2. The Government should not seek to raise the price above the competitive market level by limiting the amount of coal that Federal leasing policies make available to the market. *

3. The Government should seek to provide adequate diversity in quantity and quality of Federal coal lease holdings offered for sale, to encourage active competition among mining companies because of the benefit to consumers such competition produces.

4. The Government should establish and announce in a timely fashion a coal leasing schedule to promote predictability and stability of Federal leasing actions. In doing so, the Government should have flexibility to change the timing of lease sales and the quantity of coal offered based on its assessment of emerging market conditions.

5. To maintain a responsive and orderly coal leasing process, the States, through their participation in the Regional Coal Teams and the Federal-State Advisory Board, should continue to play a significant role both in establishing leasing levels and in setting leasing schedules. The inclusion of State personnel in providing staff support to the Regional Coal Teams is encouraged.

6. Because appraisal of the adequacy of coal leasing is critically dependent upon the extent to which pending preference right lease applications are granted, and the Department of the Interior has proceeded very slowly in this area, review of these applications be rapidly completed-preferably within the next two years. Stress should be on those areas in which a lease sale is scheduled in the next year or so. In deciding on the appropriate level of future coal leasing, the amount that might be provided through preference right leasing should be taken into account.

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* COMMISSIONER ALEXANDER WAS NOT PRESENT FOR THIS VOTE.

Selecting Competitive Tracts

1. Tracts should be selected in such a manner that their characteristics will enhance the attainment of fair market value.

2. The exchange of Federal and non-Federal coal tracts should be pursued more vigorously, but in a careful and prudent manner, to consolidate Federal and non-Federal coal lease holdings of equivalent value into logical mining units.

3. Cooperative leasing procedures are desirable to obtain logical mining units that may be reasonably expected to receive greater bidding competition than fragmented coal holdings.

4. The Department of the Interior should sponsor more drilling for use in tract delineation and it should encourage cooperative drilling in which any additional firms could participate by paying a pro-rated charge.

Planning Competitive Sales

1. The Government should take the necessary steps to ensure the security of confidential data prior to lease sales.

2. In the conduct of lease sales the Government should continue to rely on bonus bidding.

3. The industry bids received on tracts in a lease sale on which there was extensive competition, along with the Government's pre-sale appraisals, can constitute appropriate and important sources of information for post-bid acceptance and rejection decisions.

4. Intertract bidding in appropriate cases is a desirable method for leasing Federal coal.

5. Minimum submissible bids should be established on a regional basis. This minimum should be expressed as an amount per ton.

6. To promote more competitive bidding, the Government should test the feasibility of and experiment with a variety of auction techniques.

7. The Government should have leasing policies that distinguish between new production tracts on the one hand and maintenance and by-pass tracts on the other.

8. Wherever possible, leases should be sold on a competitive basis. However, where reasonable efforts to obtain competitive bids have failed, the Government should have authority to negotiate a fair price.

Appraisal Methods

1. Industry representatives wishing to bid on Federal leases should provide to appropriate Federal Government representatives information regarding prices and other terms of private coal transactions that may be needed for comparability analyses. Such information should be fully protected.

2. The Department of the Interior should enhance its capacity to perform appraisals. Preferably this should be done by expanding its own in-house resources. Where necessary, the Department should rely on outside appraisers, or some combination of these.

3. Regulations should require lessees to report details of lease assignments.

4. A "small business" tax adjustment should not be made in computing appraisal value.

5. The adjustments of estimated tract value should include factors which review of the guidelines of approved techniques prove to be appropriate, such as production rates, stripping ratio, and coal quality.

6. The Department of the Interior employs basic methodologies for estimating fair market value that are widely accepted in the conduct of appraisals by industry and government. However, model design input data, and analysis should be improved.

7. Where a Federal tract is of use only one party and no competition is expected, estimates of tract value should be based on the value of the tract to the adjoining mine or coal owner, rather than the "competitive" or "stand alone" value.

Key Statutory Factors

1. For post-1976 leases the 10-year diligent development requirement should continue in place but it is recommended that Congress considers allowing a 10-year extension to be provided on the payment of advance royalties on a escalating bases. This escalation basis should be determined at a level designed to stimulate timely development. *

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* COMMISSIONER ALEXANDER RECUSED ON THIS ISSUE AND COMMISSIONER BRIMMER WAS NOT PRESENT FOR THIS VOTE.

2. For pre-1976 leases the lessee should begin paying advance royalties at the time of the next lease adjustment, and on the same schedule as may be paid for post-1976 leases after 10-years from lease issuance.*

3. The requirement for consent of qualified surface owner before leasing should be maintained. However, in light of difficulities reported, Congress should reexamine the need for limitations on payment for surface owner consent.

4. It is recommended that Congress consider giving the Secretary of the Interior administrative discretion to reduce Federal royalty rates for coal tracts prior to a lease sale, where current royalties would have adverse effects on production of the resource.

5. The base for calculating Federal royalty payments should be the F.O.B. price minus all State and local severance and similar taxes. **

6. To promote greater competition in transporting Federal coal and to achieve fair market value for Federal coal, it is recommended that Congress consider instituting a review to assess whether shippers of Federal coal are adequately protected from anticompetitive or discriminatory practices when slurry pipelines or other forms of transportation competition are insufficient.

Organization

1. The BLM economic appraisal function should be organized with a centralized coordinating group for policy and analytic guidance and with regional rather than State teams for implementation.

2. The BLM centralized coordinating group for economic evaluation should develop and validate a uniform appraisal method.

3. The BLM Tract Delineation Teams should include an economic analysis capability.

4. The BLM Sales Panel which make bid acceptance or rejection recommendations should be constituted in a way that assures the presence of those panels of persons with the background and capabilities of making judgements with respect to appraised values.

5. The Inspector General should be directed to conduct periodic audits of the Federal Coal Program and necessary expertise should be contracted from the private sector where appropriate.

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* COMMISSIONERS WALSH, GORDON, AND LINOWES VOTED: COMMISSIONER ALEXANDER RECUSED AND COMMISSIONER BRIMMER WOULD HAVE RECUSED HAD HE BEEN PRESENT.

** COMMISSIONER WALSH ABSTAINED FROM THIS VOTE.

IX. CONCLUSION

The current Federal Coal Management Program has evolved over the course of a decade and responds to direction from the three branches of the Federal Government. This program, coal includes:

1. Sound economics;
2. Environmental protection;
3. Coordination, consultation, and cooperation with State Governments;
4. Public participation;
5. National security factors;
6. National economic and employment considerations; and
7. Consumer protection measures.

This type of program is necessary to manage the Nation's coal resources because of the Federal Government's significant influence in the west -- where there is a growing dependence on Federal coal to meet future energy needs. The accelerated leasing program undertaken in 1981 allows environmentally preferable coal leases to compete with older leases that pre-date environmental laws -- a necessity if the Western States are to maintain their environmental standards.

Fostering competition as well as reducing speculation and windfall profits also results from the leasing program. This is particularly significant in order to avoid the situation that the Department faced in the early 1970's -- a considerable amount of tonnage under lease with only limited production to benefit the consumer and the Nation.

Industry and Utility companies should be able to shop around for competitively priced coal and ultimately reduce the end price to consumers.

By developing our domestic coal resources, jobs are provided in businesses that are both directly and indirectly associated with coal mining. It also reduces the Nation's dependence on imported oil and helps American businesses compete in world markets.

Not all the potential coal in a region is offered for lease. Through a tiered process (land-use planning, activity planning, lease sale, and mine plan stages), areas are eliminated until the most environmentally, socially, and economically acceptable tracts are put up for sale. Of those tracts offered, the bonus bidding procedure is the best method for deciding who actually gets the tracts offered for sale.

In keeping with the market orientation, price is believed to be the best indication of demand. Although some have concluded that the price of coal reserves is declining, in actual fact, the price (as reflected in the bonus bids received) as a percentage of selling price of mined coal in a region has remained relatively constant (0.5 - 0.7 percent).

While the Federal Government receives compensation in the form of bonus bids for coal tracts, the most efficient means of generating revenues for the Treasury comes in the form of royalty payments on the value of coal actually produced. Over the past several years, there has been a noticeable increase in coal production from Federal leases (e.g., Federal coal production was up 70 percent from CY 1980 to CY 1981.) Thus, the amount of royalties payable to the government have significantly increased and, because of the 50-50 sharing rule, the States as well as the Federal Treasury benefit.

Another key reason for continued leasing relates to the diligence standards and environmental acceptability of the older coal leases (i.e., those that pre-date recent environmental laws). The newer leases are generally more economically efficient to develop and have passed through a series of screens to ensure their environmental quality. New leasing makes both good economic sense and good environmental sense.

Additionally, new and old leases face diligent development requirements. Many of these leases could revert to the government for failure to meet diligence, thus, leaving a gap that can only be filled through a stable leasing program.

These are strong and convincing reasons for the continuation of leasing Federal coal. It has been the Department's policy to lease to meet the market demand for coal reserves so that coal is available for development when it is needed most. However, for the market to rely on the Federal Government as a source of coal reserves, the government must first prove itself a stable and viable participant in the market place. The "stop and go" performance that characterizes most of the history of the Federal coal program is not conducive to sound economic growth. The moratorium in the 70's or the give-a-way in the 60's supports the government's bid to be a sound market participant. Leasing through the Federal Coal Management Program assures the Nation that the United States will not be caught short in the event of another oil supply crisis similar to the 1973-74 oil embargo. In essence, Federal coal is the Nation's insurance policy for meeting future energy demands.

APPENDIX A

Comments from Other Agencies and Departments Concerning Federal Coal Leasing Levels

1. Department of Justice, in a January 23, 1981, letter to Wyoming State Director, BLM, concerning the Powder River I leasing target:

> ". . . The present approach of attempting to match leasing to future coal demand on a regional basis produces leasing levels that are dangerously low [and] poses a serious risk of insufficient leasing which, especially in the Powder River region, would have serious competitive and economic efficiency consequences for the Nation with the inevitable result of increased coal prices."

2. Department of Energy letter to Wyoming State Director, BLM, on January 17, 1981, concerning the Powder River I leasing target:

> "We are very concerned with the way these production goals are used in establising a leasing target for the 1982 Powder River region sale. Since we believe that the cost of underleasing Federal coal is substantially greater than the cost of over-leasing, we strongly suggest moving toward the high production goal for the Powder River region . . .."

3. Council on Wage and Price Stability letter of January 26, 1981, to the Wyoming State Director, BLM:

> ". . . DOI's methodology . . . severely limits - without adequate justification - the quantity of Federal coal that can be offered in a given sale. [COWP's staff report] recommends that coal leasing targets be based on producer's demand for coal reserves rather than on forecasts of end-use demand."

4. The General Accounting Office, in its Report to the Congress of August 22, 1980 (A Shortfall in leasing coal from Federal Lands: What Effect on National Energy Goals?), criticized the leasing target for the January 1981 lease sale in the Green River-Hams Fork Region of Colorado and Wyoming.

> "Our analysis indicates that Interior's leasing target should be about three times greater than it is . . .. If Interior does not update its assumptions and improve its target setting process, the risk also is increased of not leasing sufficient coal to satisfy national energy needs." (Page 58 of GAO Report EMD 80-87.)

The above comments were highly critical of the leasing target methodology developed by the previous Administration. Explicitly and implicitly, the GAO, COWPS, DOJ and DOE support the current leasing level approach that attempts to satisfy the market demand for reserves.

APPENDIX B

TABLES

TABLE 1-a

FUTURE LEASE SALES IN FY 1984 AND FY 1985

(RECOVERABLE RESERVES)

Region	Leasing Level (Billion Tons)	Expression of 1/ Leasing Interest (Billion Tons)	Reserves Available 2/ for Leasing (Billion Tons)	Anticipated Sales of Recoverable Reserves (Billion Tons)
San Juan River	.3 - .4	.75	1.09	.3
Uinta-SW Utah	.6 - .8	1.52	.73	.5
So. Appalachian	042 - .117	-	.12	.1
Green River/ Hams Fork	.5 - .7	0.9 - 1.5	1.0	.3
Powder River	1.2 - 4.85	2.5 - 5.9	7.3	1.5

1/ Tonnage figures should be viewed as rough estimates. Many expressions of interest received by the Department do not indicate exact tonnage the company is interested in leasing.

2/ Tonnage figures are estimates of the reserves that are available for leasing following tract delineation.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Solid Mineral Leasing.

TABLE 1-b

COAL ACTIVITY PLANNING COMPLETION DATES

COAL PRODUCTION REGION	EXPRESSION OF INTEREST	TRACT DELINEATION	SITE-SPECIFIC ANALYSIS	LEASING LEVELS	RCT TRACT RANKING	DRAFT EIS	FINAL EIS	RCT LEASING RECOM.	SALE DATE
FORT UNION									
Round I							02/83	02/83	09/83
GREEN RIVER									
Round II	05/82	09/82	12/82	01/83	01/83	08/83	05/84	05/84	09/84
POWDER RIVER									
Round II	08/82	11/82	03/83	04/83	05/83	01/84	06/84	07/84	01/85
SAN JUAN RIVER									
Round I	--	03/82	04/82	03/82	04/82	09/83	03/84	04/84	09/84
SOUTHERN APPALACHIAN									
Round II	08/82	10/82	01/83	03/83	02/83	05/83	12/83	01/84	07/84
UINTA-SOUTHWESTERN UTAH									
Round II	02/82	04/82	07/82	03/82	07/82	05/83	10/83	10/83	06/84

NOTE: The dates after 9/83 are for planning purposes only.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Office of Resource Evaluation and Program Development.

TABLE 2-a
TRACTS SOLD IN ALL REGIONAL SALES

(January 1981 Through February 1984)

REGIONS	DATE OF SALE	NUMBER OF TRACTS	ACRES	TOTAL RECOVERABLE RESERVES (In Mil. Tons)	TOTAL HIGH BONUS BIDS
Fort Union	September 1983	3	7,091	96.5	$ 773,310
Green River-Hams Fork	January 1981	6	11,283	87.9	$1,730,277
	April 1981	2	5,572	64.4	9,013,430
	October 1981	1	5,974	62.7	1,792,227
	April 1982	2	4,262	112.4	23,164,125
	Total to Date	11	27,091	327.3	$35,700,060
Powder River	April 1982	10	16,554	1,089.6	$43,484,434
	October 1982	2	5,176	471.6	23,689,632
	Total to Date	12	21,730	1,561.2	$67,179,066
Southern Appalachian	June 1981	6	5,040	37.8	$180,537
	December 1981	4	3,629	7.3	623,605
	September 1982	3	1,520	1.1	247,114
	Total to Date	13	10,189	46.2	$1,051,256
Uinta-Southwestern Utah	July 1981	5	10,854	79.7	$14,200,410
	February 1982	1	160	2.3	158,400
	May 1982	1	640	7.5	5,216,000
	February 1984	1	4,999	36.7	9,542,041
	Total to Date	8	16,653	126.2	$29,116,851
Total All Regions	To Date	47	82,754	2,157.5	$133,820,543

NOTE: Data may not add to totals shown due to independent rounding.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Solid Mineral Leasing, Automated Coal Lease Data System, February 28, 1984.

TABLE 2-b
BONUS BIDS FROM ALL REGIONAL SALES
(JANUARY 1981 THROUGH SEPTEMBER 1983)

Region	Total Acres Sold	Total High Bonus Bids	Avg. Bid	Total Recov. Reserves Sold	Avg. Bid	Avg. FOB Mine 1/ Per Ton of Coal	Percent of 2/ Coal Price	Avg. BTU	Avg. High Bonus Bid
		(In Dollars)	($/Acre)	(In Mil Tons)	(Cents/Ton)	(In Dollars)		(Per Pound)	Cents/Mil.
Fort Union	7,091	773,310	109	96.5	.80	9.14	.088	6,700	.060
Green River-Hams Fork	27,091	35,700,060	1,318	327.4	10.90	20.00	.545	10,250	.531
Powder River	21,730	67,179,066	3,092	1,561.2	4.30	7.50	.573	8,250	.261
So. Appalachian	10,189	1,051,256	103	46.2	2.29	30.00	.076	12,500	.092
Uinta-SW Utah	11,654	19,574,810	1,680	89.5	21.87	28.00	.781	12,300	.890

1/ Average price of coal sold at the mine.

2/ Cents/ton divided by average mine-mouth selling price per ton of coal = percent of coal price.

3/ Average BTU/LB. x 2000 = BTU/ton divided by 1,000,000 = cents/ton divided by MM BTU/ton = cents/MM BTU.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Office of Resource Evaluation and Program Development, Automated Coal Lease Data System, September 30, 1983, and Coal Week, McGraw-Hill, Inc., Washington, D.C., February 7, 14, 28 and March 7, 1983, Vol. 9 No. 7 through No. 10.

TABLE 3-a
PRODUCING FEDERAL COAL LEASES
BY STATE: FY 1983

State	Producing Leases		Production in FY 1983	Production Value	Royalty Value
	Number	Acreage	Thousand Tons	(Thousand Dollars)	(Thousand Dollar
Total	126	217,448	105,449	1,550,462	56,667
Alabama	1	2,338	105	4,390	176
Colorado	33	33,479	10,795	252,840	12,270
Montana	11	29,347	11,574	172,086	13,682
New Mexico	4	10,031	2,290	41,420	5,001
North Dakota	6	6,879	2,253	10,961	2,106
Oklahoma	3	4,576	101	3,967	606
Utah	35	42,307	10,124	272,953	7,612
Washington	1	241	231	4,615	46
Wyoming	32	88,250	67,976	787,230	15,168

NOTE: Details may not add to totals due to rounding. The statistics represent production and royalty reported during FY 1983 and adjustments made during FY 1983 for prior periods. The FY 1983 royalty management statistics may not represent actual production achieved in FY 1983 or the royalty accrued on that production due to adjustments for previous years. These data are unpublished.

SOURCE: U.S. Department of the Interior, Minerals Management Service, Royalty Management Office and Bureau of Land Management, Division of Solid Mineral Operations, Automated Federal and Indian Leasable Minerals System, September 30, 1983.

TABLE 3-b
PRODUCING FEDERAL COAL LEASES
BY REGION: FY 1983

Region	Producing Leases		Production in FY 1983	Production Value	Royalty Value
	Number	Acreage	Thousand Tons	(Thousand Dollars)	(Thousand Dollar
Total	126	217,448	105,449	1,550,462	56,667
So. Appalachian	1	2,388	105	4,390	176
Fort Union	7	7,679	2,295	10,961	2,106
Green River-Hams Fork	29	55,047	12,715	282,177	8,441
Powder River	28	73,861	74,386	851,824	28,588
San Juan River	6	10,371	2,365	43,193	5,142
Uinta-SW Utah	50	63,335	13,252	348,747	11,475
Other	4	4,817	331	9,170	739

NOTE: Details may not add to totals due to rounding. The statistics represent production and royalty reported during FY 1983 and adjustments made during FY 1983 for prior periods. The FY 1983 royalty management statistics may not represent actual production achieved in FY 1983 or the royalty accrued on that production due to adjustments for previous years. These data are unpublished. Data in this table are used in figure 1, page 2.

SOURCE: U.S. Department of the Interior, Minerals Management Service, Royalty Management Office and Bureau of Land Management, Division of Solid Mineral Operations, Automated Federal and Indian Leasable System, September 30, 1983.

TABLE 3-c

FEDERAL COAL PRODUCTION, PRODUCTION VALUE, AND ROYALTY VALUE
FISCAL YEARS 1973-1983

Fiscal Year	Coal Production (Thousand Tons)	Production Value (Thousand Dollars)	Royalty Value (Thousand Dollars)
1973	24,247	93,307	$4,044
1974	32,139	140,307	5,535
1975	43,590	224,947	8,335
1976	52,491	338,312	10,949
1977	50,197	430,230	9,718
1978	58,781	550,712	12,321
1979	59,141	699,234	16,119
1980	71,958	862,817	24,569
1981	94,645	1,198,764	40,280
1982	104,430	1,546,322	61,062
1983	105,449	1,550,462	56,667

NOTE: The data in this table are used in Figures A-5, A-6 and A-7.

SOURCE: U.S. Department of the Interior, Geological Survey, Federal and Indian Lands Coal, Phosphate, Potash, Sodium, and other Mineral Production, Royalty Income, and Related Statistics, June 1981 for data for FY 1973-1975. Data for succeeding Fiscal Years are unpublished and are from Minerals Management Service, Royalty Management Office.

TABLE 3-d

ROYALTY REVENUES FROM FEDERAL COAL LEASES,
BY STATE: 1970 TO 1983

STATE	FY 1970	FY 1975	FY 1980	FY 1981	FY 1982	FY 1983
TOTAL	$1,069,935	$4,857,423	$24,568,692	$40,280,418	$61,062,456	$56,666,428
Alabama	106	24,394	31,669	0	3,686	175,600
Alaska	41,146	51,438	0	0	0	0
Colorado	303,405	364,035	7,115,564	11,952,875	13,170,861	12,270,325
Kentucky	NA	126,643	10,830	0	0	0
Montana	11,027	1,219,863	2,065,885	3,922,771	8,782,544	13,681,669
New Mexico	1,347	242,716	1,472,900	3,440,772	7,841,138	5,000,506
North Dakota	135,997	60,013	272,272	101,677	745,253	2,106,051
Oklahoma	54,053	43,199	826,942	1,009,820	1,110,490	606,141
Utah	299,547	456,480	3,968,073	5,094,133	5,833,291	7,611,949
Washington	NA	18,851	0	0	13,115	46,149
Wyoming	222,805	2,249,791	8,804,557	14,758,370	23,562,078	15,168,038

NA: Not Available

NOTE: Details may not add to total due to rounding. The statistics for FY 1983 represent production and royalty reported during FY 1983 and adjustments made during FY 1983 for prior periods. The FY 1983 royalty management statistics may not represent actual production achieved in FY 1983 or the royalty accrued on that production due to adjustment for previous years. These data are unpublished.

SOURCE: U.S. Department of the Interior, Minerals Management Service, Royalty Management Office.

TABLE 4-c
SURFACE ACREAGE OF LEASES,
BY STATE: FEBRUARY 24, 1984

State	Number of Leases	Total Acres
TOTAL	634	948,783
Alabama	15	13,044
Alaska	2	3,160
California	1	80
Colorado	144	161,600
Kentucky	5	4,292
Montana	27	44,514
New Mexico	30	44,921
North Dakota	19	16,660
Oklahoma	49	80,415
Oregon	3	5,411
Pennsylvania	2	80
Utah	219	319,188
Virginia	1	251
Washington	2	521
Wyoming	115	254,646

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Solid Mineral Operations, Automated Federal and Indian Leasable Minerals System, February 24, 1984.

TABLE 4-d
SURFACE ACREAGE OF LEASES,
BY REGION: FEBRUARY 25, 1984

Region	Number of Leases	Total Acres
TOTAL	634	948,783
So. Appalachian	15	13,044
Fort Union	22	22,556
Green River-Hams Fork	116	182,948
Powder River	90	181,106
San Juan River	29	45,060
Uinta-Southwestern Utah	285	405,691
Other	77	98,378

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Solid Mineral Operations, Automated Federal and Indian Leasable Minerals System, February 24, 1984.

TABLE 5
PRLA'S ISSUED, WITHDRAWN OR REJECTED FROM
SEPTEMBER 1, 1982 TO FEBRUARY 9, 1984
BY STATE

State	Number of PRLA's 10/1/82	Acres	PRLA's Issued	Acres	PRLA's Withdrawn or Rejected	Acres	Number of PRLA's 2/17/84	Acres
Alaska	3	7,680	1	2,560	---	---	2	5,120
Colorado	17	32,671	-	---	---	---	17	32,671
Montana	4	14,673	-	---	---	---	4	14,673
New Mexico	26	75,509	-	---	---	---	26	75,509
Utah	16	53,472	1	2,563	3	11,360	12	39,549
Wyoming	81	157,196	2	7,638	9	9,717	76 *	148,961
Total	147	341,201	4	12,761	12	21,077	137	316,483

* Six Peabody PRLA's containins 9, 120 acres were reinstated by order of IBLA on 2/9/84.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Office of Resource Evaluation and Program Development, Automated Coal Lease Data System, February 23, 1984.

TABLE 6-a

FEDERAL COAL PRODUCTION AND LEASE ACREAGE

Fiscal Year	Coal Production (Million Tons)	Acres Under Lease	Tons Per Leased Acre
1950	7.1	120,747	59.1
1955	5.7	135,740	41.9
1960	5.4	199,272	27.3
1965	6.2	373,997	16.5
1970	7.3	763,658	9.6
1973	24.2	-	-
1974	32.1	-	-
1975	43.6	779,650	55.9
1976	52.5	-	-
1977	50.2	-	-
1978	58.8	788,308	74.6
1979	59.1	799,401	73.9
1980	72.0	812,163	88.6
1981	94.6	842,949	112.2
1982	108.0	948,486	113.9
1983	105.4	948,783	111.1

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Solid Mineral Operations, Automated Federal and Indian Leasable Minerals System, September 30, 1983, and the Division of Solid Mineral Leasing, Federal Coal Management Reports FY 1977 through FY 1983.

TABLE 6-b

TOTAL UNITED STATES COAL PRODUCTION AND FEDERAL PRODUCTION IN MILLION TONS
BY STATE: CALENDAR YEAR 1979 THROUGH 1982

State	Production in CY 1979		Production in CY 1980		Production in CY 1981		Production in C
	U.S.	Federal	U.S.	Federal	U.S.	Federal	U.S.
Total	781	60	830	69	824	117	833
Colorado	18	8	19	9	20	11	18
Montana	33	9	30	10	34	27	28
New Mexico	15	5	18	6	19	9	20
North Dakota	15	1	17	1	18	1	18
Utah	12	7	13	9	14	9	17
Wyoming	72	30	95	33	103	60	108
Other States 1/	620	0	637	1	618	0	624

1/ Few or no Federal coal resources are located in the other States.

NOTE: Details may not add to total due to rounding.

SOURCE: Total U.S. Production - Department of Energy, Energy Information Administration.
Federal Production - Department of the Interior, Minerals Management Service, Royalty Management Office.

TABLE 7
ANTICIPATED SALES AND BONUS BIDS

Region	Ave. High Bonus Bid (Cent/Ton)	Total High Bonus Bid (Dollars)
San Juan River 3/	7.0	21,000,000
Uinta-SW Utah	10.0	50,000,000
So. Appalachian	3.0	3,000,000
Green River - Hams Fork	8.0	32,000,000
Powder River	5.0	75,000,000
Total		187,000,000

NOTE: Anticipated sales, average high bonus bids and total high bonus bids are based on analysis of information available and only represent a rough estimate of anticipated receipts and sales. Anticipated average high bonus bid in cents-per-ton, and total high bonus bids are given in constant 1983 dollars for each region.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Solid Mineral Leasing.

1/ Although the current coal market is poor, it is expected that it will recover sufficiently by the time these sales are held.

2/ The Fort Union sales represent leases sold but not issued and a follow-up sale in 1984, or 1985, neither of which is certain. It does not include the second round.

3/ The San Juan River regional sale has been postponed, pending review of all WSA's.

TABLE 8-a
PROJECTED FEDERAL LEASE AND MINE DEVELOPMENT POTENTIAL
OF LEASES ISSUED AS OF 1980
IN THE FIVE ACTIVE WESTERN COAL REGIONS

Region Name	Producing/Favorable #	Producing/Favorable Billion Tons	Uncertain/Unlikely #	Uncertain/Unlikely Billion Tons	Expected 1995 Capacity 1/
Fort Union	14	.27	9	.28	32.4
Powder River	62	8.46	11	.73	236-247
Green River/ Hams Fork	72	1.19	28	.84	56.3-59.4
Uinta/SW Utah	142	2.15	125	1.92	61.3-80.9
San Juan River	21	0.44	6	.04	25
Total	309	12.51	179	3.81	411-444.7

1/ Capacity of producing and favorable mines with Federal leases.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Solid Mineral Leasing, April 22, 1983, and Congress of the United States, Office of Technology Assessment, An Assessment of Development and Production Potential of Federal Coal Leases, December 1981.

TABLE 8-b

TOTAL REGIONAL PRODUCTIVE CAPACITY, PRODUCTION FORECAST AND RESERVE DEMAND ESTIMATES FOR 1995

Region Name	Estimated 1/ Capacity	Estimated 2/ Production	Demand for Federal 2/ Coal Reserves
	mmtons/yr	mmtons/yr	billion tons
Fort Union	40	41 - 55	.3 - .7
Powder River	343	180 - 306	0.5 - 4.0
Green River/ Hams Fork	54	42 - 48	.2 - .7
Uinta/SW Utah	49	32 - 36	.0 - 0.6
San Juan River	48 - 60	32 - 34	0.1 - 0.9
Total	534 - 546	327 - 487	1.1 - 6.9

1/ BLM field office estimates, assuming no demand constraint but current mine marketing cost constraints.

2/ The estimated production and demand for Federal coal reserves are based on recent updates of production forecasts and have not undergone review by the regional coal teams.

SOURCE: U.S. Department of the Interior, Bureau of Land Management, Division of Solid Mineral Leasing, April 22, 1983.

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